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The long-range objective of the Central Atlantic Regional Educational Laboratory (CAREL) dance program was to develop children's ability to solve problems in movement terms and to express emotional involvement and creative ideas through dance. Workshops were conducted for 15 non-specialist teachers to explore the concepts of space, time, and force, and to incorporate these concepts into a dance curriculum. Prototype lessons were developed for 3- to 8-year-olds. Classroom activities focused on solving problems through movement: discovering the concepts of space (shapes, sizes, and relationships); time (both clock and calendar intervals); and force (weight, gravity, energies in motion, and relationships between objects in space). Evaluations consisted of teacher and classroom observations. These evaluations indicated positive outcomes of behavioral objectives. Recommendations were made for the improvement of teacher selection and preparation and development of a process-model curriculum. (DR)

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Development of a Dance Curriculum for Young Children

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PS 002202

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FOREWORD

This is one of a series of six volumes which report on Phase One of the CAREL Arts and Humanities Curriculum Development Program for Young Children. Volumes two through six -- respectively for visual arts, dance, literature, music, and theatre -- document Phase One details of the rationale and approach, teacher preparation program, curriculum development and contents, evaluation findings, and recommendations for the future. The first volume is an overview of the entire program and outlines recommendations for Phase Two.

The U.S. Office of Education funded CAREL to complete Phase One which lasted two years, ending on May 31, 1969. For each component, this included exploratory studies; the preliminary development of curricula materials, objectives, and strategies; preparation programs for classroom teachers; classroom tryouts and evaluation of the preliminary curricula; and preparation for controlled pilot testing in the schools. For these purposes, CAREL prepared 48 classroom teachers to teach one art component each, and explored each of the arts singly, with 2,809 pupils in 27 CAREL field schools for approximately a year.

These programs in the arts and humanities were truly innovative in both content and scope. Two of the five components -- dance and theatre -- did not even exist in most American schools. The other three existed, but in generally limited programs which did not nearly meet the expressed needs of pupils.

Each component discovered that most students were constrained, restricted, and lacked interest in their usual school roles as recipient learners and repositories of information. The CAREL program developed new roles for students. They could become explorers of the full range of each art form, creative and expressive artists, poets, writers, composers, and performers; they were respected as audiences, critics, and evaluators with valid feelings, imaginations, and ideas. They were trusted and encouraged to play orchestral and exotic instruments, to use recording equipment and cameras, to work with professional quality art materials, and to express their own poetry and stories in their own language. Teachers became guides with available knowledge, skills, and resources to help students solve their own problems with their own creativity.

The results were almost instantaneous in terms of student excitement and eager involvement. They could be "turned on" within minutes by personal interest and pride in their new roles. And as exploring, creative, and expressive self-educators, they also learned more of the classical information and skills than they ever did in their former roles as recipients and repositories. Now, for example, a pupil asked his music teacher how great composers had solved certain problems in beginning a composition. The pupil then listened to classical recordings for the answers and considered them for his own composition. This was very much different from listening to the beginning of classical recordings to memorize answers for a test.

Much remains to be done to develop and refine the CAREL curricula and especially the preparation programs for classroom teachers. But the CAREL "way of learning" can provide the essential pupil energy needed for further curriculum development, energy in the kind of pupil interest and excitement that accompany his musical composition, his work of art, his poem or story or improvised dramatic role.

Due to the lack of funds, CAREL can not continue into Phase Two. However, it is hoped that the information and findings of these CAREL studies will enable and enhance the continuation by others into the next phase of an arts and humanities curriculum development program for young children.

Martin Dishart, Ph.D.
Program Director

RATIONALE

Dance is one of the oldest forms of human expression. Historically it has served many functions in society, ranging from group ritual and spectacle to the individual expression of ideas and emotions. Some of the most sublime and creative works of man in the 20th century have been expressed through dance, both in Europe, with the traditional dance, and in this country with the so-called Modern Dance. This latter has greatly influenced traditional or folk dance, but its greatest contribution lies in giving the dance to the individual. It has broken with the orthodoxy of the traditional Ballet, and has given validity to personal expression. Since one individual differs from another, it is especially relevant that this form be adapted for educational dance. As such, its major function is that it objectifies significant personal responses through forms which are conceived and made tangible through the artistic uses of the body.

As an art form, dance has a two-fold function: communion with self and communication with others. Its structure is nondiscursive but it speaks through movement. Movement and gesture are the oldest languages known to man and are inherent in all human activity. Dance, therefore, offers another language through which perceptions and feelings, which could not otherwise be stated in words, are expressed symbolically and in visual-kinesthetic images.

Educational dance has its origin in the classroom and must be made available to children as a significant part of the educational process and as an essential feature of their aesthetic growth and development. This means that every child can and should participate in the dance education program, not simply the talented or gifted. The dancer and educator working together can open to children new areas of perception whereby they can become consciously aware of their potential for creative movement.

For young children, especially in early childhood schooling, creative dance is defined as the interpretation of a child's ideas, feelings, and sensory impressions expressed through his unique use of body movement. Such movement may be sequential or non-sequential, patterned or non-patterned, with or without musical or percussive accompaniment. While we are concerned with the basic elements of dance, it is not the intent of the CAREL program to produce dancers in the sense that years of study, devotion and training make the professional. It is suggested that young children are in exploratory stages of investigation of this art form, and should not be led prematurely into a dance expertness which might necessitate an undue emphasis upon technique. Rather, each child needs to experience a variety and range of movement in order to develop a dance vocabulary which bears his own imprint.

Creative dance for young children is concerned with the control of the body in order to use the language of movement expressively and creatively, in response to imagery and sensory data in the environment. Experiences in dance are fundamental and accessible to all children because a child's body and its expression are one. It has been said that to move is to be revealed for what we are. This means that the body is not an external instrument or a "thing" which a child manipulates. It is his very self, in that psychologically and kinesthetically it is a direct agent of his feelings. It is manipulated by a child in the service of his perceptions, and is not an instrument which is foreign or outside of himself. For these reasons, dance experiences are the simplest and most immediate of any of the art forms we can provide for a child. That is, in bringing his own body under control, he controls the most immediate part of himself.

The whole process involved in the dance experience is ultimately more important than the specific activities within the process. Creative innovation in dance is manifested in degrees, rather than by steps. There are degrees of awareness, sensitivity, and coordination involved in each child's movement. Empirical data from learning theorists, psychologists, and child development specialists strongly indicates that from an activity point of view, movement is basic in children's learning. It may even be that movement is the initial way in which a child begins the creative process and that within an appropriate educational setting, a child may be inspired to release his creative potential through dance.

The very nature of the artistic process in dance, as in all of the arts, calls for a willingness on the part of teacher and child to enter into the experience, to be self-searching, and to express emotions and ideas. In this context, the process must be seen as non-judgmental; it is judgmental only in respect to the support offered to children in responding and recognizing the inherent qualities of dance, from which criteria of performance are drawn.

Through dance, a child may show how he feels about people, objects, and phenomena. Because of the strong social needs which operate, dance represents one form of communication through which a child shares his ideas and feelings with others. Although the artistic process is manifestly an individualized function, children may gain rich experiences when they are able to share with one another.

The crucial factor is not whether a child is operating alone, but whether he has the individual freedom and opportunity to function alone or in pursuit of a shared experience. In exploring the sensory data around him, a child begins to build an ordered conception of his perceived reality by exploring his own movement potential. No one can determine the extent of children's imaginative or creative abilities, but within a motivating educational environment in the classroom, we may release children's creative energies through dance movements, and broaden the horizons of their aesthetic perceptions.

The primary purpose of offering a program in dance to young children is to help them to develop a kinesthetic awareness of their ability to use their bodies expressively. Since space-time-force are the inherent components of dance, used in varying dimensions, they provide the connective tissue of the conceptual framework and preliminary assessment of observable behaviors. While space-time-force have objective characteristics, in creating and observing dance they cannot be viewed apart from the body as the moving center. They function only in interrelationship and are used by each child in a subjective, idiomatic way to express ideas, emotions, feelings. Expected outcomes, therefore, are projected in terms of a child's unique ability to use space-time-force in relation to his own body instruments, and to use these elements as words in the language of movement.

Changes in children from 3-8 years of age can only be expected in long-range terms, but certain expected outcomes within a five year period can be identified. The following objectives also serve as evaluative criteria:

1. Development of a personal movement vocabulary based on dance fundamentals (locomotor and non-locomotor movement) expressed through space-time-force.
    (a) An awareness of the use of space by movement changes in direction, level, range.
    (b) An awareness of the use of time by responding to the internal rhythms of the body (pulse, breath) and to external rhythmic elements of tempo, duration, accent.
    (c) Awareness of force in movement expressed by the flow and control of energy.

2. Ability to solve problems in movement terms by translating ideas, emotions, feelings into objective dance forms.
    (a) Ability to focus on sensory data to find personal solutions expressed through dance studies.
    (b) Ability to transform conventional, everyday movements into dance gestures.
    (c) Ability to share movement experiences and ideas with others.

3. Development of strength, flexibility, and coordination, to discipline the body and to refine skills of communication through dance movement.

4. To develop an awareness of the language of movement on both a verbal and kinesthetic level.

Although the process involved in creating dance is a complex phenomenon, there are certain observable behaviors revealed by a child which provide significant insights for evaluation. These behavioral components are concomitant to the observable changes stated above:

1. Emotional Involvement - Evidence from a child that he has the necessary impetus for creative work in dance.
    (a) Demonstrates sustained involvement by continuous participation in dance activities.
    (b) Demonstrates an increasing ability to initiate ideas for his own movement explorations.
    (c) Demonstrates an increasing ability to build on his own experiences to expand his movement vocabulary.

2. Focus on a Problem - Involves concentration in using sensory data to structure dance movement, and the ability to relate new data to existing information to work out a focus.
    (a) Demonstrates persistence in exploring alternative ways of using his body within a given activity.
    (b) Demonstrates a wide variety of responses in exploring a dance problem.
    (c) Demonstrates increasing ability to sustain an activity in relation to his age and psychomotor development.

3. Development of an Idea into Objective Form - Evidence that a child uses the elements of dance (space-time-force) and movement fundamentals (locomotor and axial) as a process which eventuates in an expressive dance form.
    (a) Demonstrates an ability to respond to new movement ideas and extend them into dance forms.
    (b) Demonstrates ability to draw upon previous discoveries and integrate them into a personal movement vocabulary.
    (c) Demonstrates increasing control and coordination or large and small body parts to selectively express dance movement.
    (d) Demonstrates ability to observe and evaluate the qualities of his own movement.

The CAREL dance staff conceives of the school as a place for creative activity, and is concerned with providing for and releasing children's creative energies through dance experiences. Given this context, the rationale presented here is deemed viable for both ghetto and middleclass children. Since expected outcomes are judged on an individual basis with little dependence upon verbalization, language barriers which might exist in ghetto schools are minimized. Children's responses are assessed in movement terms, rather than through conventional, discursive communication.

Any strategy designed to implement a program in dance must take into account factors of space and time. Enough space must be allocated so that children can move freely as individuals or in groups; enough time so that children can focus upon and carry through movement problems. This implies an understanding by teachers and school personnel that an environment appropriate to conditions of dance must be deliberately arranged, as any educational environment must be for maximal learning. Ultimately, strategies can only be effective if dance is regarded as a regular part of the early childhood curriculum and is given commensurate status with other areas of learning.

The question of expected outcomes raises the issue of what evaluative criteria shall be used in assessing strategy. In a basically extroverted society, it is perhaps difficult for the non-verbal, non-quantifiable to be accepted. Writers in the field of aesthetics and the arts have expressed the belief that creative work eludes measurement. Clearly, the problem calls for the refinement of tools of evaluation, yet, at the same time, it throws into relief the danger of subjecting intuitions, appreciations, and attitudes to inappropriate measuring processes. If there are unobtrusive measures which can be employed to assess the outcomes of changes in children's behavior, the CAREL dance staff addresses itself to this task.

As an initial attempt to draw criteria which establish an aesthetic basis for evaluation, the following are suggested:

1. Within the basic elements of Space-Time-Force:
   (a) To perceive the basic elements of dance.
   (b) To identify dance elements, on a verbal and kinesthetic level.
   (c) To become actively involved with dance elements.
   (d) To relate these elements to his own experience and attitudes.

2. Within the total construct of Space-Time-Force:
   (a) To differentiate and discriminate among dance elements.
   (b) To perceive the total structure as it relates to the organization and groupings of movement.
   (c) To perceive the structure in relation to his own exploratory dance studies.
   (d) To become involved in other areas related to dance, e.g., music, theatre, etc.

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CLASSROOM TEACHER PREPARATION

Teacher Workshops

Teacher Selection

With a view toward relating to the general educational scene, the CAREL dance component geared its program to meet the needs of regular teachers in self-contained classrooms. The decision was taken to select non-specialist teachers representing diverse educational environments from inner-city to middle class suburbia. Fifteen teachers from the Metropolitan area, Virginia, and Maryland constituted the initial group, three from each age level, from preschool through third grade.

Selection of teachers was made from diverse sources. Some were selected from prior involvement in other innovative curriculum programs, although not in dance; some were recommended by local dance educators as having had rudimentary training; others were known as practicing teachers to members of the dance component.

In terms of teaching experience, the participants ranged from first year teachers to master teachers of considerable experience. Ages ranged from early 20's to mid-40's. In ethnic composition, there were 6 Negroes and 11 whites.

Function of the Workshops

The success of the CAREL dance program rested largely upon the sensitivity and competencies of the classroom teachers. Since dance is one of the least experienced arts in the classroom, there was an underlying recognition that for teachers with little or no previous involvement in dance, this was a particularly challenging venture. For, unlike other arts which require the use of external media, the body itself is the medium of expression.

Since dance as an art form is concerned with feelings and sensibility, the teacher herself must engage in the artistic process. Through a program of personal exploration and creative invention, teachers become involved in investigating the basic concepts and elements of dance in the same manner suggested for students in the classroom. The intent of such participation is to encourage teachers to explore their own subjective responses to creative dance problems, in order to stimulate and guide such responses from children. Since it is the teacher who best recognizes the dispositions and needs of her children, her own movement explorations add another dimension in gaining insights into their movement potential.

The functions of the workshops, therefore, were conceived as developing in teachers:

1. An awareness that dance is a body of knowledge and that its expression in movement forms involves both "knowing" and "feeling".
2. An ability to experience on their own levels the types of learning opportunities which they will be offering to children in the process of curriculum development.
3. An ability to perceive, through self-exploration, the types of dance experiences which emerge spontaneously, which may lead to new learning opportunities.
4. An ability to record learning experiences occurring in the classroom which are generalizable for inclusion in curriculum plans.

In general, workshops were designed as both conceptualizing and performing sessions, wherein teachers would have materials broad enough in scope to adapt to their particular classroom situations. The assumption was that if given an experiential understanding of the basic concepts involved in dance, teachers would be free to improvise from content in related aspects of their daily programs. As an essential phase in the curriculum development process, the interrelationship between the materials presented in workshops and the learning opportunities explored by teachers in the classroom provided a continuous source of data for the formulation of prototype lessons.

Organization of Workshops

Workshops were held bi-monthly, from October through March, in the dance studio at American University. Although the locus of children's dance is the classroom, the dance staff considered it important ot allow teachers to function in a large, unobstructed area, so that they could freely explore their own needs for space. (See Appendix A, page 1.)

Each workshop was devoted to the investigation of a concept and its extension into movement problems. In order to capture the rich and varied responses of a group of individuals seeking diverse solutions, one member of the dance staff acted as recorder, while the others guided experiences on the floor.

For dancers or dance-educators deeply involved in this art form, an extensive repertoire of dance activities is built up which, in practice, assumes an intuitive and improvisational character. For classroom teachers for whom this is a new area of discovery, such spontaneity only arises after they build a considerable reservoir of experience. The unique role of the artist in education, therefore, is of making these experiences coherent to teachers by providing a frame of reference so that each dance problem feeds into a continuous and reintegrative process.

The search for the CAREL dance component was to find an appropriate form for teachers, which included both the conceptual and expressive aspects of a given dance exploration. In keeping with the process-model approach, the content of each workshop embraced the intellectual understandings inherent in each concept, but also drew heavily from classroom situations which the dance staff observed through weekly visitations. Each workshop was prepared in advance and followed a written form consistent with one used by teachers in recording their own classroom experiences. The format for the workshops represents an attempt to include both conceptual and qualitative elements within the structure of problem-solving situations. It includes the following categories:

I Concept

Space: direction, level, range, body shape
Time: rhythmic and metrical: beat, measure, phrasing
Force: percussive, sustained, swinging, vibratory movements

II Problem: Exploration of a concept using the distinguishing elements in various contexts.

Solutions: Observed teacher responses. Depending upon the nature of the problem, solutions are described in movement terms in relation to individual, couple, trio, or group responses. Special focus is given to personalized responses which serve as examples of the infinite possibilities of any movement exploration.

III Problem: Elaboration of the initial problem in increasing levels of complexity. (The number of problems vary with each session.) (additional elements: elements involved in other concepts which are used to elaborate the problem)

Each session was designed to help teachers develop a kinesthetic awareness of movement possibilities, as well as a verbal movement vocabulary which would reinforce each movement experience. In this way, the "doing" and the "knowing" of what is done become interrelated. Therefore, problems are not stated in terms of "instructional strategies", which tend to be mechanical and elicit fragmented behaviors, but are presented through a conceptual vocabulary which reinforces, for teachers and children alike, an awareness of the qualitative elements with which they are immediately involved. (The specific content of the workshops is included in another section.)

Problems Inherent in a Classroom Setting

The Physical Environment

As a direct result of participation in the workshops, teachers become conscious of their own idiomatic use of space and time. As the subjective elements of dance, teachers recognized that the body moves in and through space, which requires time, and since the body moves in relation to gravity, force is introduced. Exploring the many ways in which the body moves to express ideas, moods, and emotions also leads to a new understanding of space and time as the inherent physical components of the environment in which dance exists. Beginning with an awareness of their own spatial needs, using their bodies as the center of reference, teachers become increasingly aware that dance, perhaps more than any other art form, requires an adapted physical environment.

With the recognition that space and time can be manipulated, the problem becomes one of rearranging each particular classroom situation. Regular visitations from the CAREL dance component made it possible to offer suggestions and to reinforce the notion that thoughtful consideration be given to preparing an ambience for dance. Continuous emphasis was placed on the necessity for planning as a precondition for restructuring an environment. As a fundamental consideration for teachers because of their crowded daily schedules, it assures that the transition from one activity to another is not chaotic, but is fraught with expectancy. This is perhaps most difficult for those new to dance who are still uncomfortable in this type of open, physical encounter. As the dance program developed, the common concerns of planning shared by teachers involved ideas of space, time, and grouping.

Since in most public schools it is not possible to have a large empty room available, the teacher must make the most of the space that exists in her classroom. Preparing a space for dance is analogous to setting a stage, without the rigid separation between performers and audience. A necessary part of the dance experience is that children learn to use their bodies in relation to the physical space around them, which becomes known to them through movement. Directions such as "forward, backward, sideward" are identified in relation to the perimeters of the dance area, and such definitions are essential for a child's developing spatial awareness. Whether the space provided is at the front of the room, or occupies the central area, it must be ample enough for children to move at least in small groups at a time.

Planning for space inevitably involves time - time to literally "push back the desks."[1] In some instances, the children were engaged in activities away from the classroom before "dance time." In such cases, teachers were encouraged to provide as large a space as possible by placing tables sideways along the walls with chairs pushed underneath so that the seats were inaccessible. Children returning to the classroom eagerly responded to the novelty of a changed environment, which by its very nature had built-in expectations of where to sit (on the floor), how to sit (in a group around the teacher) and where to put shoes and socks (under the chairs). Although such expectations had to be verbally expressed by the teacher, the physical environment had already been prepared.

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[1] Taken from Albert Cullum, Push Back the Desks, (New York: Citation Press, 1967).

Children also responded with equal enthusiasm when they were directly involved in arranging their own environment. In most classrooms transitions involved the participation of the children. At the beginning of the year, teachers were dividing their energies between moving furniture and attempting to control the children by verbally informing them of what they were about to do. In response to suggestions from the dance staff, the children were encouraged to help set up their own situations, which ultimately took less time.

The problem for the teacher is one of pacing, so that minimum time is spent in moving objects and maximum time is devoted to creative efforts. The question of time raises two concerns: one of scheduling for the total dance period; the other of a much more sensitive nature, the amount of time necessary for the exploration of a given dance experience. Within the limitations of the daily schedule, most teachers were able to devote 30 to 45 minutes a week, and as the program developed, those teachers who felt more confident had dance twice a week. Each prototype lesson was deliberately designed to that the number of sessions necessary to explore it remains at the discretion of the teacher.

In regard to the second consideration, as teachers learned to observe children more perceptively, they realized that each child's use of time, like space, is unique to his personal expression, and may have little to do with others exploring the same problem. Through their own investigation of movement in the workshops, teachers became aware that more satisfaction is derived from pursuing an experience in depth than in fragmenting it with the intrusion of many unrelated activities. It is the qualitative aspects which are sought, not the quantitative accumulation of "activities". Combined classroom observations by teachers and dance staff revealed that even very young children frequently become absorbed in working through one problem for as long as 20 minutes. Balance is the key: enough time for children to become conscious of their own improvisational abilities, but not so much time that ideas become scattered and lose focus.

It became increasingly apparent, as teachers attempted to work with the whole class at once, that one of the most effective ways of allocating space and time was through grouping. Although dance for the most part is a shared experience, it is important that the approach in the classroom be that each child moves in his own way.

During the early part of the program, teachers were encouraged to participate with the group, but as children began to initiate their own problems and reach for unique solutions, it became necessary for teachers to be in a position to observe individuals more closely. As a result of similar classroom observations and sharing of common experiences in workshops, the opportunity for children to function in small groups became evident. By allocating sufficient space, teachers came to realize that a small group of children could utilize a larger dance area for freer improvisation of a particular problem. In addition to making it possible for more children to demonstrate their work, it led them to understand that an important aspect of the dance experience is in observing each other's efforts. Observation is an important function since dance is a visual-kinesthetic form. Children can observe and record mentally what they see, which sharpens their own perceptions and offers alternatives for their own movement vocabulary. Teachers recognized the advantages of children moving in small groups as they noted that children began to feel differently about themselves. Children expressed their feelings not only through their own movements, but in their judgments of observing how others pursued the same dance problems.

Grouping, then, involved not only those who chose or were chosen to work together, but those who were observers as well. In this instance, it is again the teacher's sense of balance which creates an environment for an exciting or frustrating experience. The balance to be sought is that the observers be encouraged to watch attentively so that they become kinesthetically involved in the movements being created by other children. Teachers therefore had to become sensitive to the tempo level of the children, and to adjust the pacing of groups alternatively observing and performing.

Because of the limitations of time, it was not always possible for all children to demonstrate their improvisations within a dance period. This pointed to the need for teachers to become more mobile during the dance situation so that they could observe and comment upon interesting pieces of behavior - i.e., difficulties experienced and challenges met. In so doing, they were increasingly able to select and call to the attention of the class those individuals or groups whose explorations included a variety of problems and modes of solutions.

Within the context of planning a responsive environment, a necessary consideration is the physical comfort of the children. The idea was projected by the dance staff at the outset that just as we do not put gloves on children when they paint, so do shoes and socks come off. It was pointed out that through tactual contact children develop a sense of strength from gripping the floor with their feet, and become sensitive to vibrations that produce an awareness of rhythm from many feet moving together. As a reinforcing element, teachers' own movement explorations in workshops helped them to recognize that bare feet encourage greater freedom. In all classrooms, despite varying physical conditions, teachers established the expectation of removing shoes and socks and even this routine added an element of excitement. Children were involved in the "ceremony" of preparing themselves for an experience.

CURRICULUM

Space-Time-Force - A Conceptual Framework

Space-Time-Force play a central role in determining ways in which a human being responds to his environment. Although they exist as physical properties of which we are almost unaware, and to which we respond almost routinely, they also exist as the aesthetic qualities of an art form. As such, they function not as technical elements, but as qualities used in expressing emotions and sensation, and are perceived uniquely by each individual.

In order to understand the difference it is necessary to distinguish between physical and aesthetic concepts of Space-Time-Force. In so doing, it becomes possible for teachers and students to understand that while these elements are taken from the external environment, in dance they are created and designed depending upon the ideas, feelings or moods a child wishes to express. As such, they are a distinct departure from the actual, physical dimensions in objective reality.

In the physical world, space becomes known to a child through shapes, sizes, and relationships between objects. In dance, space perception begins with the body as the center of reference, which determines the way each child uses space. As a child becomes increasingly aware of the dimensions of his body, he also becomes aware of the dimensions of other people and objects. A child's own spatial perception, therefore, becomes a source through which he sets limits or expands space in any creative effort. It is the difference between geometric space defined by objects, and the space which a child defines by his body in executing a movement. Thus, the response to space as projected in dance form is not rational or logical, but is expressionist and kinesthetic.

A sense of time includes both clock and calendar intervals. Physical time is arranged in a sequence of before and after, and has continuity. Time as initially experienced comes from the rhythms of the body, through heart-beat, pulse, breath. But time as an aesthetic element is not sequential. It is emotionally felt in that the time which a child establishes for movement serves his own perception, and is uniquely his. It is a created sense of duration which is compressed or extended. To a child, a unit of time may be great or small, long or short, past or present. Each movement exploration represents, in part, a temporal order imposed by a child, and exists entirely within a particular, direct experience.

Physical force involves weight, gravity, energies in motion, and relationships between objects in space. In dance, force becomes a component of space-time, and is experienced as the flow and control of energy. It is sensed as tension and is observable in the way a child establishes individual dimensions of space and time. For example, it is one feeling to push against a real wall; it is another sensation entirely to push against a non-existent wall in space, and to feel the difference in the extension of effort.

Through movement exploration, a child learns to make the transition from the experiential elements used in everyday living, to aesthetic elements which are used in developing his unique movement vocabulary. As soon as a child begins to search for the forms of dance, he is immediately exploring different uses of space, time, and force. From the teacher's point of view, therefore, these are not to be viewed as techniques to be mastered in terms of skills, but as the qualitative aspects of movement.

Since dance does not exist apart from Space-Time-Force in varying combinations, teachers must be aware that no one of these elements is executed singly or in isolation. In the very process of moving, they are interrelated and united. A movement comes into being in relation to the space which it uses, the rate of speed it takes, and the amount of energy expended. All of these elements exist in any series of actions and are the raw materials through which each child's ideas and feelings are expressed.

While it is important that children sense kinesthetically the interrelationship of these elements, it is also possible to explore them separately so that the characteristics of each can be "felt" and observed.

With this intent, the dance curriculum is divided into three major sections, each dealing with a basic concept of Space, Time, Force. Within each section, two prototype lessons are presented, designed to show how problems in increasing complexity may be developed and elaborated from a particular concept.

Such an approach is designed to make teachers aware that Space-Time-Force serve as both qualities of perception, and as aesthetic guidelines for reflection and evaluation of a child's involvement in dance. While they do not of themselves provide all of the complex aspects involved in a particular movement exploration, they offer a frame of reference for judging how a child builds a vocabulary of responses in keeping with his developing skills and sensitivities.

For example, one child's use of space in exploring body shapes will not be the same an another, just as the expression of time and force may vary among children performing the same group activity.

With these guidelines, however, and with close observation of how each individual functions, teachers become aware that space-time-force by their very abstract, subjective nature, are projected differently. What they do describe is a relative sense of aesthetic order, emerging from each child's ability to express these perceptual elements through the forms of dance.

The dance experiences suggested here are primarily educational, i.e., intended to contribute to the motor development of children, as well as to the broadening of their sense impressions. Experiences are designed to help children feel and respond organically to the basic concepts of dance (space-time-force) and to help them become rhythmically coordinated through conscious involvement in dance activity.

If creative rhythmic movement is to open possibilities for self-discovery and expression, it must take forms that are natural and educable. For this reason, each prototype lesson is based on principles of body movement within a structure simple enough to be available to children at all stages of development and complex enough to allow for improvisations.

The materials lend themselves to any classroom situation, and while they are focused around the basic elements of movement, they draw from imagery which is familiar and comprehensible to young children. In recognition of the necessity for a broad, flexible scope of activities within the six prototype lessons, an attempt has been made to include possibilities for the varying personal rhythmic patterns of children, and to provide opportunities for widely different types of children to express themselves.

These experiences are intended to sustain children's interest and participation, and to give children satisfaction in two kinds of knowing: in the many ways in which they can use their bodies creatively; and in the self-knowledge which comes from the discovery of a new language in which to interpret ideas and feelings.

Unit A - Concept: Space

While it may seem obvious to teachers that the child himself is three-dimensional, and has myriad ways in which to move, children need to discover how to use space. Through exploration of the elements of space, they need to know that in order to cope with it, it must be occupied, contained, defined.

A child needs to be made aware, for example, that as soon as he takes a place on the floor, standing or sitting, he defines that space by his very presence. He needs to understand that the area in which he exists becomes occupied. Even as he stands immobile he designs space, for we can see around him, follow the plastic lines of his body, and know that he has dimension. When he simply extends an arm or swings around the axis of his own body, he defines both his immediate (internal) body space and the external space around him. If he executes any type of locomotor movement, he is designing the space between himself as a moving being (body in motion) and the perimeter of the dance area. Beyond this, it is the space between the child and other children and objects that has yet to be defined.

Two concepts necessary for an understanding of a child's spatial perception are: 1) That the body is the center of reference which determines the way a child uses space, and 2) that movement is the focal aspect of space perception. Thus, while movement is the essential ingredient in the exploration of space, the elements of space which a child uses will, in turn, affect the quality of his movement.

As a means of building a movement vocabulary, there are established terms in dance which should be used with children to reinforce their experiences. Elements of space are described as direction, level, and range.

Direction is the line of motion made by the body moving through space (e.g., forward-backward, sideward, diagonal; going in a circle is a combination of forward, sideward, and backward movement).

Level is the direction of the body in space and is felt as a transfer of weight from the center of gravity: high - begins when the center of the body is shifted above its normal position (e.g., tip-toe, jumping, leaping); medium - exists when the trunk is in an upright position (walking, running, turning); low - begins below the center of gravity in whatever direction taken (e.g., walking with flexed knees, crawling, rolling).

As an additional dimension of moving in any direction, floor patterns occur as designs made by the feet. Generally, such patterns are either straight or curvilinear. Combinations of straight lines result in square, rectangles, triangles or zig-zags; curved line patterns may be any variation of a circle or semi-circle (e.g. spiral).

The value of exploring directions and patterns is that children come to understand that the body does not have to move only frontally, and that the direction of a movement impels the feet to form patterns which give the body more freedom. Such patterns are frequently the rudimentary steps of folk-dance, which is another aspect of a child's movement repertoire.

Moving through space in a controlled way also demands focus, of which even young children can be made aware. Focus is conventionally suggested by the use of eyes, but also applies to the use of body parts, body lean, or body tension. In any case, focus gives added impact to the direction of a movement or may establish new directions in opposition to the body (e.g., walking on the diagonal, looking over the opposite shoulder).

Space is also defined by range, which involves the amount of space the body fills as it moves (e.g., large-small, wide-narrow). Range applies not only to total body movement, but to the distance covered by a body part.

The idea of more or less space to enhance the expressiveness of a movement is made known to a child when he experiences changes in direction, level, range. Each of these may be explored as separate activities, for each has a different kinesthetic effect upon the body. At the same time, the very nature of the unity of movement makes it apparent that all of these elements function together, and that each may lend a different and more developed quality to a dance experience.

Space - Workshop

I Concept: Space. To explore the elements which define space:

- A. Direction
- B. Floor pattern
- C. Level
- D. Range
- E. Body Shape

II Problem: Direction - the line of direction made by the body as it moves in space.

- A. To explore body plane - i.e., the part of your body that is leading the movement.
  1. Walk in a straight line to the opposite wall letting your forehead take you; your heels lead you; your ear take you, your elbow, etc.
     Solutions: forehead leads in forward direction, body plane is frontal; heels lead in backward direction, body plane shifts to backward position; ear leads in sideward direction, feet move in cross-step or sliding pattern, body plane moves on the diagonal.
  2. Use one locomotor movement to go in a straight line to the opposite wall; as you move, change your direction at the sound of the drum, and change your locomotor movement.
     Solutions: The body quickly shifts its position in space when it changes direction; changes in body direction also may change locomotor movements - i.e., from walking and running (forward) to skips, hops (forward and backward), slides, crossing feet (sidewards).
- B. To explore the relationship between body direction and spatial direction.
  1. Take two steps forward, turn two steps to the side, turn two steps backward, turn two steps to the side, turn two steps forward.
  2. What directions are you moving in?
  3. What plane of the body are you using?
     Solutions: Turning is not a separate direction, it is a combination of all directions (frontward, sideward, backward); body plane remains frontal even though direction changes; turn may be executed in any spatial direction; focusing on body direction in space increases ability to identify and isolate body planes - i.e., front, back, side.

C. To explore body plane and spatial direction using imagery.
   1. How does a steam shovel work?
   2. Does it only move in one direction?
   3. Does it always face the same way?
      Solutions: Steam shovel swings around, moves forward, goes down to scoop up dirt, comes up with load of dirt, backs up. (additional elements: awareness of difference between immediate space around body, and space that body uses with locomotor movement; use of force as impulse for direction of body parts; use of differential range and level of space; time - rhythm of steam shovel develops definite pattern as it moves in space)

III Problem: Floor Pattern - the design that the movement path makes on the floor.

A. To explore the pictures that the feet make on the floor as the body moves in different directions through space. You have chalk (imaginary) on the bottoms of your feet so that as you move around the room, you can see the design on the floor.
   1. Walk out a square shape on the floor; which directions did you move in?
   2. Walk out a square changing your body direction at each corner of the square.
   3. Move on the diagonal across the room in a spiral pattern; what part of your body is leading you? What directions are you moving in space?
   4. Move in large circles across the floor; let your whole body make the design; is this the same floor pattern as a spiral? What's the difference?
   5. Walk in zig-zag pattern, changing the body plane on each "zig" and "zag".
      Solutions: Solving problems in body plane and direction leads to an awareness that the body can move in ways other than frontally (which is the accustomed position); that the body as a moving form creates a line in space, and that a line makes different patterns; that curved and straight lines take different directions.

B. To explore floor patterns using imagery.
   1. You are a lion pacing from wall to wall in his cage.
   2. You are a snake moving about his cage.
      a. What floor pattern did your feet make?
      b. What did your body make?
      c. What directions did you move in?

IV Problem: Focus - as an element of direction - i.e., the direction of the gaze which accompanies the movement - expressed as: (1) the direction in which the performer looks, (2) the direction of the body, (3) the spatial direction of the body.

A. To explore ways of moving which help the body "look" where it is going.
   1. Take space out on the floor - move any way around the room and focus in the direction in which you are going.
   2. What other part of your body can you focus with besides your eyes?
   3. Extend that body part and let it lead you through space.
   4. Now walk in one direction while holding your gaze in a different direction.
   5. What happens to your sense of balance?
   6. Walk with the beat of the drum; when the drum stops, focus in a new direction, when the drum beats again, walk in that direction.

B. To explore the effects of focus using imagery.
   1. Move from one side of the room to the other but focus your eyes and body in such a way as to give the feeling that the only direction in which you are going is down.
      Examples: cat-mouse, stalking a prey, looking for a lost object.
   2. Move around the room in different directions but focus with your eyes and body as if you are going up.
      Example: follow a fly crawling up the wall to the ceiling, watch birds flying.
      Solutions: Ideas of focus are initially difficult for children to understand in terms of looking or not looking where they are going; the above problems increase awareness that focus also affects the movement of the whole body in moving through space - i.e., affects the balance and force of a movement as well as its dramatic quality.

V Problem: Levels - the direction of the body in space defined as high-medium-low, with the body as the center of reference.

A. To explore levels in space in relation to different parts of the body.
   1. Standing perfectly still, with your head erect and your feet together; show on your body where the middle level is; where is it in space? Move out into space with your whole body on a middle level.
      Solutions: "Middle" on the body is the area between the shoulder girdle and the hips; when the body is in an aligned position, "middle" corresponds to the center of gravity of the body. Moving in a middle level; walking with shoulders and head bent over at waist; walking with legs wide at sides, arms extended laterally; curved body shape - head and arms curved over torso.
   2. Where is high on your body? Where is high in space? How can you reach for space?
      Solutions: "High" is seen as the area from the shoulders to the upstretched finger over head; it actually begins when the center of gravity is transferred above its normal position within the body; jumping, leaping, tip-toeing, hopping; elevation is increased when legs jump with knees bent, arms move over head in a diagonal position; "reach" for space implies use of space beyond that immediately above the head.

3. Where is low on your body? How "low" is low in space? How can you reach different levels of low before you hit the floor? Solutions: "Low" is usually interpreted as the area from the knees to the toes; actually, it begins below the center of gravity of the body in whatever direction is taken as soon as the body moves below the middle; i.e., walking with knees flexed; crawling, sliding on stomach, rolling.

B. To explore levels in space using imagery.
   1. You are sound asleep on the floor; at the sound of the gong (bell) wake up and stretch slowly, slowly until every part of you is awake.
      (additional elements: tempo and body weight - with sustained movements the body feels the shifts in balance as it moves on different levels)
   2. What sorts of equipment do you play with on the playground? Explore the different levels in which they move.
      Examples: Merry-go-round, see-saw, jungle gym, swings, block-building, riding bikes.
      (additional elements: direction and range of movement)
   3. Animalsmove on different levels. Show us with your bodies what animal you are, how it moves, in what direction.
   4. Objects in nature exist on different levels - explore things that are high-medium-low.
      Examples: sun, stars, rain, snow, smoke, stones rolling, leaves falling, flowers and plants growing, insects moving.
   5. Common objects - zippers, escalators, walking up and down stairs, elevators.

VI Problem: Range - the extent to which movement reaches out from the body into space.

A. To explore the elements of range through dynamics of large-small, wide-narrow.
   1. Explore contrasts in range using axial movement: begin as a small balloon, as you fill up with air, grow larger and larger; now let the air out slowly and become smaller and smaller.
      (additional elements: levels, body shape, tempo)
   2. To explore contrasts in range using locomotor movement: to the rhythm of the drum, take small skips around the room, as the drum changes (becomes louder and increases tempo), change the quality of your skips.
      (additional elements: contrast of soft and loud sounds gives impetus for small and large movement; contrasts in tempo affect range of movement)
   3. Choose an axial or locomotor movement, explore it to find out whether the range is affected by an increased tempo.
   4. Explore axial and locomotor movements and feel how the range of movement is affected by changes in force.
      Solutions: Explorations lead to an awareness of dynamics (contrasts) in movement: the relationship between tempo and range; the relationship between force and range.

VII Problem: Body Shape - the shape that the body assumes as it moves in and through space, which also affects the shape of the space around it.

- A. To develop an awareness that the body is a three-dimensional object
  - 1. Find a place on the floor and sit down; look at the different shapes that all of your bodies are making.
  - 2. Design the space around you using your whole body to make a curved shape, a triangular shape, a rectangular shape.
  - 3. Work with a partner and create a shape in space with your bodies.

    Solutions: Recognition of geometric shapes: awareness that body shapes involve internal body space as well as the space around the body; awareness of spatial relationships created by two bodies' shapes.

    (additional elements: range, level, force/tension)

Space - Prototype Lesson

I Concept: Body Shape

- A. The shape the body makes by itself
- B. The shape the body makes in relation to other people

II Problem: To describe different shapes the body makes in space, using a box as an image.

- A. How can you make a "box" around your desk, holding hands with another child?

  (Sense of shape derived from a concrete experience)
- B. Now move out on the floor and find your own space:
  - 1. How can you make a box with your own body?
  - 2. How can you make a box with one other person?
  - 3. How can you make a box with more than two people?
  - 4. How can you make a box with something in it?

III Solution:

- A. Different angular body shapes through exploration of:
  - 1. Child's own body in relation to internal and external space
  - 2. Relationship of two bodies designing a shape
  - 3. Relationship of several body shapes
  - 4. Creating a shape and filling the space
- B. Use of body parts- in using different parts of body, a child creates different shapes which relate to the space
  - 1. Use of arms and hands alone
  - 2. Use of legs and feet alone
  - 3. Use of trunk, head, and arms
- C. Qualities of shape - i.e., feelings of weight and size as expressed in the body
  - 1. A strong box? A limp box?
  - 2. A long box? A square box?
  - 3. A heavy box? A light box?

D. Levels in space - use of various levels in relation to the body: high - medium - low

IV Understandings for the teacher

The child, by exploring body parts, force, and qualities of shape in movement will be able to use these experiences in further exploration. He has added to his movement through this specific image, but this is a prototype for other images which suggest body shape.

V Understandings for children

How does a child feel when he creates a box lying down on the floor? Standing at mid-level? What sort of a shape "fills" the box? As a child relates his visual-kinesthetic experience of a box to his own body shape, he is communicating an idea (abstracting an idea) of a conventional, everyday image in movement terms.

VI Elaboration

- From rectangular to circular shapes (objects in the environment as sources of imagery)
- Exploration of different qualities of angular and circular space
- Exploration of other shapes: linear, triangular

Space - Prototype Lesson

I Concept: Space

A. Locomotor Movement
B. Direction
C. Differentiation of body parts

II Problem: To explore directions in space through locomotor movement using different body parts as the impulse for direction

A. How do we get from "here to there" with different parts of the body?
   1. When you walk into the room, what part is leading you? You don't always have to walk with your face or your "front" leading you.
   2. How would you get from "here to there" with your "fanny" leading you?
      Solution: Crouching with knees flexed, buttocks extended, walking backward, torso bent forward at middle level, walking backward.
   3. What other parts of you can lead you? Let another part of you take you for a walk.

Solutions: stomach: back arched, abdomen forward, knees flexed, arms hanging down, head back, in forward direction; back arched, abdomen extended, walking on hands and feet crab-fashion, in forward direction; big toe: body erect, one foot extended with weight on forward toe, back foot sliding, front foot hopping in forward direction; knees: both knees bent, body crouched, wide space between knees as body moves forward; elbow: one elbow extended parallel to floor, body in lateral position, moving sideways with feet sliding or crossing; back: back arched, head extended back, body inclined backward (complete transference of body weight to back - i.e., loss of gravity will pull body to floor); top of head: head bent over forward, pulling body in forward direction. (additional element: transference of body weight using different body parts)

III Problem: To sense how different qualities of force used by different body parts give focus to direction.

A. Feel that there is a string attached to each part of your body; feel the pull on that part lead you through space. Solution: More intense exploration of previous problems: some confusion between push and pull. (additional elements: increased force leads to more sustained movement; sustained movement requires slower tempo, greater use of space of a particular body part, changes in body shape)

IV Understandings for the teacher:

The child, by consciously exploring body parts as the focus for direction, can be made aware that he himself is three-dimensional, and can move in other than conventional forward directions.

V Understandings for children:

How does a child move when an elbow or shoulder leads him in a sideway direction in space? What do his feet do? How do his arms help him move? How does he feel the different parts of his body "push" or "pull" him? What is the difference in the qualities of force (energy)? What shapes do his body make when his stomach, or back, or knee leads him? What happens to his sense of balance when he uses various body parts?

VI Elaboration

A. Exploration of moving from "here to there" without using the feet?
   1. What parts of the body does the child use?
   2. What type of locomotor movement does he use?
   3. Can he describe it using a movement vocabulary? example: pulling, pushing, rolling, twisting, etc.

B. Exploration of differences in force:
   1. Pulling or pushing against another child and sensing resistance.
   2. Difference between pushing and pulling imaginary objects through space.

Unit B - Concept: Time

Just as a child cannot grasp the concept of space unless it is limited and defined, so time as a concept must be divided and made relative in order to be understood.

Time is expressed through the human body as rhythm which penetrates the body via those functions which are recurrent such as pulse, heart-beat, breath. Teachers may note a child's unique time sense in movement by observing him walk across the floor without accompaniment. Frequently, the beat which he establishes will have a relationship to his own heart-beat or energy level. Thus, the essence of a child's response to rhythm is both a kinesthetic awareness of his own underlying pulse, and an element of force-time.

To help children develop an appropriate movement vocabulary that expresses this concept, elements of time are described as tempo, duration, accent.

Tempo is the rate of speed of a movement, or the rate at which one movement follows another. Tempo depends upon a time-unit commonly referred to as a beat, which is the pulse of music, just as the heart-beat is the pulse of a child's rhythm. Beats are both accented and unaccented.

Accent may be described as emphasis, and is an additional force given to certain beats or sounds which occur in a series. In responding to musical sounds in body movement or with percussive instruments, children become aware that metrical accent indicates the first beat of every measure. In responding to an underlying beat, which is the steady beat or pulse of a rhythm, a child may establish his own rhythmic pattern in which the emphasis is not on the first beat. In this case, he is defining rhythmical accent.

Duration is the length of time of a beat or sound. It may be even or uneven, long or short combinations of sounds or beats which exist for a specific period of time.

By moving and listening to different beats in various patterns, children recognize that just as rhythm is necessary to make speech interesting, so an accented beat gives structure to music and impulse to rhythm. Without it, dance movement becomes aimless and monotonous.

For further definition, elements of rhythm include dynamics, measure, and phrasing.

Dynamics is the strength or intensity of a movement which produces a contrast or change in that movement - e.g., stop-go, fast-slow, percussive-sustained. In order to get more intensity within the same movement, for example, a child might discover ways in which to: a) use more bodily movements, b) use more force, c) use larger body movements, d) use a louder step, word, or sounds. A change in the dynamics of an action changes the "feel", and as every movement has its own feeling, it becomes another source for individual expression.

Measures are groupings of like intervals (underlying beats) into larger units of time. Children can understand that a measure is a sentence of beats, just like a spoken sentence is a line of words. In order to experience this rhythmic structure directly, children can discover the underlying beat to a piece of music by moving first to the steady beat, and then to each beat which represents the melody. Sensing different rhythms through their bodies is more of a kinesthetic experience than merely beating time with their hands. Once having established the beat, children can define changes in measure by any type of change in body movement or in dynamics.

Phrasing is a grouping of measures giving a temporary feeling of completion. As a measure is a rhythmic sentence, so a phrase may be considered a paragraph. A phrase is of longer duration than a measure, and is a means by which children learn to respond to longer groupings of time. It can be pointed out that just as we speak in sentences and need to stop for breath, in music or movement we group to give the same feeling of completion of our ideas or movement before starting again.

While it is necessary to experience these elements of rhythm as organized groupings, it is also important that teachers understand that a child may not always respond to a regular rhythmic pattern, but may improvise patterns of his own. In folk music, for example, which children especially enjoy for its simple repetitions and familiar content, the melody does not always follow in regular measures. That is, the time may change from 3/4 to 4/4 in the middle of a song. Similarly, a child may not respond to the rhythm that he hears, or that is observable by the teacher, but to the rhythm that he feels.

A child's own movement inventions have a rhythmic structure which he can be made aware of by the supportive beat of a drum. Once he is aware, he can begin to include them into further movement explorations. The intent of introducing experiences in time with young children is to help them become consciouslyrhythmical.

Time - Workshop

I Concept: Time

A. Rhythm: Beat, measure, phrasing
B. Differences between rhythmic and metrical patterns

II **Problem**: To explore how rhythm provides structure to language and to a movement vocabulary

A. If-I-speak-to-you-like-this-with-out-an-y-change-in-my-voice-how-does-it-sound? (flat, monotonous)
What is missing? (rhythm)

1. What street do you live on? Say the whole sentence - "I live on ______ _______" and when you feel the rhythm, clap it.
Solutions: Each individual listens to the rhythm of the syllables of a particular street name and must clap a beat for each syllable; (frequently there is a lack of coordination between the verbal and the kinesthetic response to rhythm - e.g. three syllables are clapped in two beats, a large awareness of accented beat). Teachers call on individuals with similar or different rhythmic patterns to answer the question by clapping so that the group becomes aware of the effects of rhythmic structure.
(additional elements: group can create choral rhythms or diverse rhythmic sound patterns)

2. Now clap the name of your street and move across the floor in that rhythm:
Solutions:

I	live	on	West	Hill	Drive
long	long	long	short	short	short

I	live	on	N	Street
short	short	short	long	short

I	live	on	In -	grid	Street
short	short	short	long	long	long

I	live	on	Dal -	as	Av -	e -	nue
long	long	long	short	short	short	short	short

3. As you move, say the name of what you are doing:
Solution:

I	live	on	West	Hill	Drive
leap	leap	leap	run	run	run

4. Use other parts of your body besides your feet to "talk" the rhythm.
Solution: Feet may establish underlying beat, rhythmic beats are expressed in arms, head, torso; syllables expressed in other than locomotor movement - i.e., jump, crouch, bend, swing.

B. To explore rhythmic structure in music, using words of folk songs as movement areas.

Examples: Seeger, American Folk Songs for Children. (See Appendix B, page 1)
"Clap Your Hands" (adapted from Old Joe Clark), p. 86
"Walk Along John", p. 134-35
"Jim Along Josie", p. 72-75
"Hop Old Squirrel", p. 109
Landeck: Songs to Grow On (See Appendix B, page 1)
"Hey Betty Martin", p. 72
"There's a Little Wheel A-Turning In My Heart", p. 10-11
"The Little Red Wagon", p. 70-71
"Galloping Horses", p. 75
"Going to Boston", p. 78-79
"The Paw Paw Patch", p. 116-17
Landeck: More Songs to Grow On (See Appendix B, page 1)
"Hop Up, My Ladies", p. 23
"All the Fish Are Swimming in the Water", p. 30-31
"Let's Go to the Zoo", p. 42-43
"On, Roll On", p. 74
"Rig-A Jig Jig", p. 80
"Punchinello", p. 96
"Little Lady from Baltimore", p. 104-5

1. Pick up the steady (underlying) beat by responding in movement to the action words in the song.
(Everyone sings the first verse of the song together if the actions are clear; in some cases, the entire song is sung first.)
Example: American Folk Songs for Children. (See Appendix B, page 1)
"Clap Your Hands", p. 86
Word clues: Clap, clap, clap your hands
(axial movement) Shake, shake, shake your feet
Nod, nod, nod your head
Twist, twist, twist yourself
Swing, swing, swing around
(Locomotor movement) Walk, walk, walk around
Skip, skip, akip around
Hop, hop, hop around
Gallop, gallop, gallop around
Walk, walk, walk around
(additional elements: response to measure and phrasing; awareness that different body movements create different rhythmic patterns)

2. Can you feel the difference between the rhythm of a skip, a slide, a gallop, and a swing?
Solutions: Each movement explored repeatedly, clapping while moving to feel the rhythm kinesthetically; awareness that in skip, slide, gallop, rhythmic pattern and accented beat are the same; swing has no accented beat.
(additional elements: Use of space for each rhythmic pattern; difference in tempo between locomotor movement and a swing)

III To discriminate between underlying beat and rhythmic patterns

A. To explore folk songs or recorded music with differing metrical beats.
   1. Let's sing this song together and clap the underlying beat. Example: "Marching to Pretoria" (Marais and Miranda, Songs of the African Veldt), see Appendix B, page 2
   2. Where is the steady beat? Identify it in metrical terms (4/4 for a march, 3/4 for walk)
   3. Now clap the melody. What do you clap in a song when you clap the melody?
   4. Half of the group clap the steady beat, the other half clap the melody. What is the difference in the rhythms? (additional elements: Use of percussion instruments - e.g., drum or tambourine for underlying beat; claves, castanets, tone gourds, maracas for melody) Solutions: Clapping or using percussion instruments reinforces awareness that the underlying beat is the basic tempo which remains constant; that the melody is every beat, which may have different time values (quarter, eighth, half) and different accents.

B. To explore musical phrasing in response to folk songs Example: Songs to Grow On: "Up On The Mountain", p. 110 (Group sings whole song together)
   1. Take a partner, go "up on the mountain" and do a motion together to the beat of the music.
   2. Find a movement that you can explore together.
   3. Use your whole body.
   4. What are your feet doing? Your arms? Do your feet have their own rhythm? Do your arms have a different rhythm? Solutions: Both partners respond to underlying tempo with different rhythmic patterns; exploration of full body movement leads to use of more space, greater awareness of relationships; use of feet leads to awareness of foot patterns; movement of arms adds another rhythmic element; partners move together or in opposition (back and forth, on the diagonal, back and back). (additional elements: Space, direction, use of body parts, force expressed through accented beats)

C. To respond to rhythmic phrasing using percussive accompaniment
   1. Move to my drum; when I stop, you stop, when I beat, you move again in a different direction. (8, 9 beats)
   2. How many beats did you feel before you changed direction? How many times did you change? (3 phrases)
   3. Move to my beats; this time when I stop, you continue to move for the same number of beats; when I start again, move with the drum. Solutions: In response to an established number of counts (6,8,9,5), the rhythmic pattern of the beats is felt in the bodies; by changing at the end of a grouping, phrasing is reversed - i.e., in whatever groupings beats are played, individuals should be aware of the number of phrases. (additional elements: Responding to phrasing with different kinds of movement - e.g., jumping, swinging, in different directions, or on different levels)

Time - Prototype Lesson

I Concept: Time

- A. Individual rhythmic patterns
- B. Relationship between different rhythmic groupings

II To explore how rhythm provides structure to language and to movement exploration.

A. To establish an individual rhythmic pattern as the basis for movement exploration.

1. If-I-talk-to-you-with-out-an-y-change-in-my-voice,how does it sound? What is missing? (rhythm; tone quality of voice)
2. What street do you live on? Say the whole sentence "I live on _____ _____." When you feel the rhythm, clap it three times. (Teacher accompanies the rhythmic pattern of the drum; repeating the sentence three times establishes a sense of phrasing).

   Examples: "I live on Por - ter Street" (Long and short)

   "I live on Wis - con- sin A -ve- nue"

   "I live on Ma- comb Street"

   Note: children frequently have difficulty clapping a rhythmic pattern which corresponds to a verbal rhythmic pattern; the problem is one of accurately hearing long and short beats, and reinforcing that rhythm kinesthetically with the body.

   Example: A child says Wis - con - sin A - ve - nue

   but claps _____ _____ __ __ __. Say it and listen to it again and clap the rhythm.
3. Now that you each feel the rhythm in your hands, you can move to it across the floor. Say the whole sentence and clap it while you are moving.

   Solutions: "I live on Jas - per Road"
   walk walk walk hop hop hop

   "I live on thir - ty third Place"
   stride stride stride jump jump jump jump

   "I live on I - da - ho A- ve - nue"
   crouching walk with knees bent /runs on tip-toes

   "I live on thir - ty - sixth - Street"
   walk walk walk jump jump jump leap

   "I live on thir - ty - eighth Street"
   leaps with arms stretched/ stamp,stamp,stamp, stamp to sides

4. The beat of the drum will help you hear your rhythm. You begin first, repeat the movement three times; the drum will follow you. (Teacher or child accompanies each rhythmic pattern; the drum beats and intensity of the sounds reinforce a child's feeling for his own time pattern).
   Note: Accompanying a rhythmic pattern by clapping increases an awareness of beat and phrasing. It is difficult at first because it not only requires movement coordination of hands, feet, and whole body, but coordination of the senses of hearing and touch with movement.

II To explore different rhythmic groupings using machines as images

A. To explore the relationship of one rhythmic pattern against another.

1. Machines have a rhythm as they work and they sometimes make sounds.
2. Take a partner. One person starts a machine-like movement; sets up the rhythm and keeps it going; the other person does a movement that has a different action.
   Solutions: Washing machine: partners facing each other, arms curved forward with fingers touching; one child twists torso back and forth; other child twists torso side to side (swishing sounds).
   Stapler: partners standing back to front; front partner walks forward and back, raising arms in forward movement and lowering on backward movement to waist level; as front child backs into arms of other child, rear child reaches around, clasps partner's hands, squeezes, and releases partner.
   Pistons: partners facing; as one child pliés, other child rises in alternating movements. (This problem was adapted by the whole class; formed groups of fours with alternating children moving up and down, making hissing sounds.)
   Gears: one partner turning clock-wise in place with left arm extended; partner turning counter-clockwise with left arm extended. As arms meet, they touch with an impulse to propel the bodies in opposite directions (clicking sounds).
   (additional elements: direction of the body in space, levels, range, qualities of force)
3. Now choose as many people as you need for your machine.
   Solution: typewriter. Group of 5 children; 3 children stand side by side in line as "keys", 2 children as the "carriage" face each other, perpendicular to the "keys" with arms extended at shoulder height, interlocking forearms, at the beginning of the line. As each "key" moves percussively in deep pliés (as if being pushed down) carriage moves to end of room which defines edge of typewriter. At this point, one child of carriage jerks whole body and makes ringing sound; "carriage" then quickly runs back to line of "keys" and process is repeated.

Time - Prototype Lesson

I Concept: Time

II Problem: To explore how time is divided into rhythmic groupings: beats, measures, phrasing.

A. To kinesthetically explore beat and measure in response to percussive accompaniment.

1. Jump in place with the beat of the drum; jump high on the heavy beats, jump low on the light beats. (Teacher plays measures of 8 beats and 6 beats; first beat is accented).
2. Jump with the drum; when the drum stops, you stop. How many beats did you jump?
3. Now jump in space; jump one phrase with the drum; when the drum stops, you jump the same measure alone (without accompaniment).
4. Someone take the drum; beat a measure of as many beats as you want but keep them steady; everyone else jump to the beat.
5. (To the group) - How many beats did you jump? (To the drummer) - How many beats did you play? Solutions: Children are responding to metrical time which is measurable, counted time; they are first feeling the impulse in their bodies, rather than mechanically counting beats to an external stimulus.

B. To explore different rhythmic patterns using a clock as imagery.

1. Take space on the floor; feel the rhythm of a clock with your whole body; your arms; your legs.
2. Are you beating the rhythm of the hours, minutes, or seconds? What is the difference in the different rhythms? (additional elements: range of space, levels using different parts of body; force expressed through different rhythmic patterns)
3. Here are instruments which sound like the qualities of a clock (drum, tone gourds, claves, maracas, triangles); explore different body movements for the different rhythms - full body on the hours, different body parts for the minutes and seconds. Solutions: hours - body swinging or rocking like a pendulum, side to side or back and forth with torso bending, arms move in circular direction on each hour, body stationary; minutes - arms swinging back and forth or swaying side to side shifting weight from one leg to another, laterally and forward; seconds - jumping on alternate feet, back and forth, side to side.
4. Now some of you take a partner or work in threes. Another small group will play the instruments, and pick up the rhythm of the hours, minutes, and seconds as you observe each clock. (After a period of free exploration, each group improvises before the class.)

Solutions: Instruments (in response to children's movements): hour - drum establishes underlying beat (whole note); minutes - claves and tone gourd divide the beats (quarter notes); seconds - triangles and maracas divide into shorter beats (eight notes). Movement solutions in partners: 1) one child is stationary with arms clasped forward (hours), other child moves around him in circle stepping on each beat (minutes); 2) two children face-to-face with arms at sides; one child turns inside out marking minutes, faces partner on the hour; 3) partners facing holding hands, knees lift together on minutes, arms swing sideways on hour; 4) partners facing, both with hands at "12 o'clock", right hand of one partner moves from 12 to 6 o'clock on every hour in a percussive up-to-down motion; other partner moves from 7 to 12 o'clock in down-to-up percussive motion; 5) standing one behind the other, one partner, with legs wide apart, swings arms back and forth like pendulum, other partner circles hands in air on the minutes.

C. To explore rhythm in relation to beats and accented beats using a cuckoo clock as imagery.

1. Take a partner; one person move to the steady beat of the clock, one person move on the "cuckoo".
   (accompaniment with instruments after movements have been improvised may reinforce rhythmic qualities).
2. Make your own sounds on the cuckoo's beat; you must feel the beat in your bodies.
   Solutions: 1) one child makes a bridge with his body, hands and feet on floor, stomach in air; on the hour, the "cuckoo" on hands and knees pops out under buttocks of "clock"; 2) one child stands with legs together, other child crouches behind him on knees, at "cuckoo", legs open wide and cuckoo darts forward; 3) partners stand front to back, on "cuckoo" front child flexes knees in crouching position, cuckoo bends forward on beat.
   (Solutions are expressed in terms of relative duration, not in actual clock time; in working together a child must sense how long or short his beat lasts in relation to other movements, and how the duration of a movement affects its expressive qualities.)

D. To become aware of one's individual rhythmic pattern using a bell as imagery.

1. Pull a big, heavy bell using your whole body; feel the weight of it.
   Solutions: 1) body plane frontal, arms together above head, pulls from high to low level; 2) body plane in the diagonal pulls in diagonal direction across body to floor; 3) body plane forward, legs apart, arms extended over head, pulls in curved direction from above head through legs.
   (additional elements: force - slow, sustained movement; space - range, level and direction from high to low; time - equal rhythmic pattern)

2. How many beats does it take you to ring the bell?
   Solutions: awareness that each individual establishes a different rhythmic pattern to execute his own movement.
3. What other kinds of bells are there? Small bells?
4. Take a partner; one of you move as the bell, one of you as the clapper.
   a. Are you both moving at the same time?
   b. What is the difference in your time?
   Solutions: Children who are bells create the body shape of a bell - i.e., arms out to sides in curved lines, body forward in curved shape; children who explore the rhythm of clappers use different body parts - i.e., one leg hitting against other leg, head shaking, swaying, nodding, arms in percussive movements: two different parts of the bell are expressed in different rhythmic groupings, bell establishes the underlying beat, clapper divides the beat into rhythmic groupings. (additional elements; body shape; spatial relationships between two bodies; range and direction of movement; different qualities of force)

Unit C - Concept: Force

Force, which is the third essential element of dance, is experienced as the amount of tension or stress of a movement. It may be defined as the flow and control of energy. Children experience qualities of force as greater or lesser tension, resistance or acquiescence to the pull of gravity, heaviness or lightness. By varying the amount of energy expended, and by releasing energy in alternate ways, children become aware of different qualities of movement.

Through movement exploration, whether locomotor or axial, force comes into being through the use of dynamics, which are sensed as changes in the release or compression of energy. Just as there are varying diversions within time, expressed as rhythm, so do dynamics in force involve changes and contrasts in the output of energy - e.g., fast-slow, heavy-light, strong-relaxed.

The qualities of force are expressed as distinct characteristics of movement, which in dance technology are called sustained, percussive, swinging, and vibratory.

Sustained movement is experienced as a smooth, constant flow of energy, for example, the ring of a large bell, a response to the sound of a gong, the "push" of a heavy imaginary object through space. The degree of muscle tension may be great or slight, with tempo varying according to the activity. As the flow of energy must be continuous, children find this type of movement difficult because of the sustained control they must exert. Through various forms of exploration, using imagery and percussive accompaniment (gongs, cymbals, etc.), they become aware that such quality comes into being by the way force is applied to the muscles and the way energy is released. Through the use of full body as well as body parts, they can identify this movement as having no shart accent, and no sharp beginnings and ends.

Percussive movement is the direct opposite in feeling from sustained movement. It has a similar quality to the beat of a drum or a triangle. It is movement which ends or changes suddenly, and lacks continuity. The degree of force may vary, but the movement itself is initiated with intensity, and the impetus is stopped suddenly. Children find this type of movement most comfortable because it usually corresponds to their own tempo levels.

A swinging movement describes the movement of a part of the body in an arc or circle around a stationary center. Children come to know this vocabulary as axial or body movement as opposed to locomotor movement, which takes the body through space. A swing is sensed as the release of the swinging part into gravity, and it is the force of gravity, and the lack of force of the muscles which initiates the action. A swing is felt and observed by an acceleration of force which gives it impulse, and by a deceleration of energy in the final phase. Tempo varies, but children soon realize that a swinging movement takes more time in its execution than a percussive movement.

Vibratory movement is a series of fluttery, staccato back and forth movements, with force continually being expended and checked. In quality, they are percussive movements which stop and go in quick succession. A child experiences a sense of quivering or shaking, ranging all the way from a butterfly's wings to the mechanical vibration of a machine.

In all cases, a child senses these qualities kinesthetically as degrees of tension within the body. Some examples have been suggested, but there are innumerable ways in which a child can experience tension. Most basic perhaps are those which heighten an awareness of his own center of gravity, and of his sense of balance with the transference of body weight. The center of gravity is not a specific point located in the same place on every child. It is actually an area made up of three planes - the vertical, the horizontal, and the lateral, which come together within the body. As each child even within one classroom has a different body structure, and may be of a different height, it is not possible to identify a specific point.

A child may, however, locate his center or "middle" when his feet are placed together and he is standing erect. At the same time, he can sense that as soon as he moves from an aligned position, either by moving any part of his body or by taking a step, there is a change in the distribution of body weight. Whether he is leaning as far as he can in one direction, or is moving from a hop to a skip, he feels the change in body weight. Through all kinds of exploration with different types of movement, he soon realizes that body weight and balance are closely related. Children can sense this relationship as it appears in different time-space patterns, by exploring changes in dynamics and tempo. For example, children can create movements in response to verbal similes such as "quiet as a . . .," "loud as a . . .," "heavy as a . . .," "light as a . . .," or they may respond to imagery which evokes tension states such as "pushing a wagon uphill," "pulling on a heavy rope," etc.

Through various forms of problem-solving using the elements within the total space-time-force framework, children come to realize that hands, feet, arms and head are capable of moving at different speeds and with different intensity, that the torso can show both heavy and light movement, in varying amounts of space and time, and that the whole body functions as an integrating and expressive medium.

Force - Workshop

I Concept: Force. To explore how different qualities of force affect the expression of movement.

- A. Sustained
- B. Percussive
- C. Swinging
- D. Vibratory

II Problem: Sustained movement

- A. To explore the force within the body that is characterized by a smooth, constant flow of energy - i.e., to explore how force is applied to the muscles in an even manner and how the even release of energy causes movement to have a sustained quality.
- B. Explore sustained movement qualities with different parts of the body.
  1. Move your whole arm so that the force in the muscles is used with control and strength and there is no break in the flow of movement.
  2. Move your head, torso, leg, body very smoothly and slowly as if it were extremely heavy, or as if it is pushing against a resisting force.
- C. To explore sustained movement with combinations of body parts and whole body.
  1. Explore sustained movement with just the head and torso.
  2. Develop this sustained movement with the head, torso, and arms.
  3. Explore sustained movement using only the hips and legs.
  4. Explore sustained movement in your whole body; start the impulse in one part of the body and let it carry through the whole body.
  5. Explore a movement by performing an activity (game, work-task, etc.) as if it is seen through a slow-motion camera.

Solutions:
arm: in sustained movement can move in numerous ways - up, down, across the body and around, in front of the body, up and across, side and down;
head, legs and other body parts: each movement of the joint allows for structural possibilities which vary depending upon the starting position and the direction of the initial impulse.
combinations of body parts and whole body: different body shapes are created - symmetrical, asymmetrical, linear, circular, curvilinear.
slow motion: tennis match, baseball game; movements of objects of a campfire - wind, fire, fire being activated by wind; bouncing a balloon in the air.
(additional elements: differentiated use of body parts; varying use of space with different body parts)

III Problem: Percussive Movement

A. To explore force within the body that is characterized by an abrupt beginning and is checked quickly and suddenly; to explore movement that ends suddenly and lacks continuity.

B. To explore percussive movement qualities with different parts of the body.
   1. Move your arm quickly and sharply and change its position with each movement.
   2. Move your head, arms, shoulders like a marionette whose strings are being jerked.
   3. Move your hips, buttocks, knees, feet as a marionette.
   4. Now move all of your body parts in a sharp, staccato way; keep the whole body moving.

C. To explore percussive movement with total body, changing position of the body with each movement.
(additional elements: use of space with different body parts - i.e., range and direction of movement; rhythmic patterns, time, changes in body shape)

IV Problem: Percussive and sustained movement

A. To explore the contrast in feeling between sustained and percussive movement.
   1. Explore a sustained movement and stop when you hear the drum beat. (Teacher beats the drum; stops the movement at an arbitrary point)
   2. Develop a percussive movement from the position at which you stopped; continue it and stop at the drum beat.
   (The exploration of percussive movement is also stopped arbitrarily, so that participant finds himself in a new and unusual position to begin his next exploration.)
   3. Now from your new position, explore a sustained movement, with a body part or with the whole body.
   Solutions: Contrasts in use of time (sustained movements take longer to execute); in space (sustained movements occupy more space and are usually axial movements); contrasts in range and level.

V Problem: Exploration of three other movement qualities - swinging, vibratory, collapsing.

A. To explore vibratory movement as in quivering, trembling, shaking action that sets the body into a small, quick, to and fro, up and down, side to side motion; energy level may range from strong to weak.
   1. Explore vibratory movements with different parts of your body (head, hands, feet).
   2. Explore vibratory movement with your whole body.
   3. What is the difference in the way you expend force (energy)?
   4. What sort of activities might cause the body to move in this manner?
      Solutions: pneumatic drill, a machine, skating on a cold day, shaking off water after swimming.
      Note: Children may understand vibratory movement in terms of "shaking", "shivering", "chattering of teeth".

B. To explore swinging as movement which takes an arc-like path or circle around stationary center; a swing is often suspended at either end of the arc and usually fits into a measure of 3 counts (at any tempo).
   1. You are a swing; explore the movement with your whole body.
   2. Where does it take you in sapce?
   3. How do you get more space?
   4. Explore a swing with different parts of your body (legs, arms, hands, feet, head, torso).
   5. What is the difference in the force? In the use of space?
      Solutions: Swinging of the arms with a balance on each foot, creating a turning pattern; swinging high and low (levels); swinging sideways and moving through space (locomotor movements); swinging and lifting the leg; swinging alternate arms and moving through space; swinging arms between extended legs (side to side, back and forth), torso bent forward.

C. Explore any one movement quality or combinations of qualities, as an activity of an object.
   1. Work in partners or in groups; develop different movements but relate to each other.
      Solutions: Machines - sewing machine. Three participants, each moving as a different part: 1) one part vibrates, 2) one part has sustained movement, 3) one part has percussive movement. Machine moves faster and faster until mechanism breaks down (collapsing movement).
      clock - sustained movement for hours, percussive movements for minutes, vibratory movement for seconds.
      waves - one participant - sustained movement of the arms and running movement of the feet; sustained movement develops into full swing as waves become larger and faster.
      roll of scotch tape - two participants - one individual is roll of tape that someone is using; assumes a round body shape on the floor, rolls halfway over and back percussively to show the tearing off by the other individual of the scotch tape.

VI Problem: External forces of movement: gravity; momentum; resistance.

- A. Gravity (collapsing movement)
  - 1. Stand in an aligned position - i.e., feet together, body erect; lean in any direction as far as you can go until you fall.
  - 2. What happens to your sense of balance?
  - 3. Explore the effect of gravity on your falling to the floor.
  - 4. Explore different ways to fall; different ways to resist and give in to gravity without losing your balance.
  - 5. Explore different ways to rise from your fall.
- B. Momentum
  - 1. Run very fast and stop suddenly; feel the momentum you establish and the way it affects your attempts to stop it.
- C. Resistance
  - 1. Move around the room fully; when you pass someone, nudge him gently with your shoulder and keep walking.
  - 2. Move around the room; when you pass someone, nudge him with a different part of your body.
  - 3. This time when you pass someone, push against him strongly - feel the resistance of the other body, and then move away.
    Note: This experience with force requires more control: children tend to "push" too hard and knock the other person down; this extension of force requires conscious awareness of the flow and control of energy.
  - 4. Now that you have pushed against a real person, feel the force when you push an imaginary object.
  - 5. Push an imaginary wall across the room until you can move no farther; feel the force in your muscles, in your body parts.
    Solutions: Participants push in a sustained movement; feel tension in certain parts of body; use body parts in different ways (arms, legs, shoulders).

VII Problem: Relation of ideas of force to classroom experiences

- A. Songs and stories of children
  - 1. Use of movement to develop greater awareness of the images and elements of stories
    e.g., animals - difference in use of force between walking movement of bears and monkeys.
- B. Science
  - 1. To explore idea that all things in the universe exert force in their movement:
    nature - waves, sun, rain
    planetary system - sun, earth, moon
    Solutions: As a child explores the element of force he:
    - a. further develops his awareness of, understanding of, and skill in using force within his body;
    - b. further develops his understanding of, and appreciation for, the dramatic implications of various movement qualities;
    - c. further develops body control and skill;
    - d. further develops his awareness and understanding of the force with which things both animate and inanimate move.

Force - Prototype Lesson

I Concept: Force

II Problem: To explore the qualities of force using different parts of the body (using pushing a doorbell when visiting a friend, as a source of imagery).

- A. Body parts: How many ways can you push a doorbell without using your hands? (gross exploration)
  1. How can you push a doorbell with your: elbow, knee, shoulder, nose, hips? (differentiated exploration)
  2. It's a heavy doorbell - what part of you would you use to push it?
  3. It's a small doorbell - what part of you would you use to ring it?
- B. Rhythm: Ring your doorbell more than once with one part of your body: (concept of force is explored through adding another dimension of movement - i.e., rhythm).
  1. Ring it three times with the same rhythm (phrasing)
  2. Do all the rings feel the same? (tempo)
  3. Make the heavy rings slower and the light rings faster (dynamics)
- C. Coordination of body parts: Push a doorbell with two parts of your body using light and heavy rings. (Problem becomes more complex and interesting by added coordinated movements.)
  1. Use both body parts together
  2. Use one part of the body after the other

III Solutions

- A. A single, conventional movement is transformed into dance expression in many different ways through the use of different body parts. Movement explorations reveal:
  1. Different qualities of movement expressed in different parts of the body
  2. Different rhythmic patterns in different body parts
  3. Different combinations of body parts produce different qualities of force
  4. Relationships of one body part to another

IV Understandings for the teacher

- A. Body Parts:
  1. Different use of body parts exerts different qualities of force
  2. Use of small body parts - knee, elbow will bring into play larger body parts - leg, arm
  3. Different parts move differently in space and time - nose, hips
  4. Use of individual body parts should be observed and identified by children

B. Rhythm:
   1. Force involves rhythm - different body parts can establish different feelings of force
   2. Different rhythms used by a body part establish a feeling of contrast - heavy-light, slow-fast, big-little
   3. Repetitions of a rhythmic phrase help a child feel his own patterns of rhythm in his body
   4. Teacher must be aware of the individual rhythm pattern set by the children (heavy, light beats can be accompanied by drums and triangles and other percussive instruments)

C. Coordination of body parts: Different parts of the body establish distinct movement qualities which are coordinated through the elements of force
   1. Different qualities of force are coordinated by the flow and control of energy expended by a child

V Understandings for children

A. The child is developing a movement vocabulary by experiencing and identifying different movements of body parts
   1. How does his body feel when he isolates a movement? (when he uses an elbow, knee in a certain way?)
   2. How does he feel about changes in the qualities of force in different parts of his body? (heavy-light?)
   3. How does he become aware that different parts of his body produce different rhythmic qualities?
   4. How does he feel when he is exploring force qualities of two body parts?

VI Elaboration: Explore force at different levels - (reach a high doorbell, medium, low)
- ring doorbells with different qualities of force in different directions - on the side, behind, on the diagonal
- push a door with various qualities of force using different parts of the body.

Force - Prototype Lesson

I Concept: Force An awareness that the kind of energy expended and controlled in a movement produces different qualities of expression.

A. Percussive
B. Sustained

II Problem: To explore percussive movement as a quality of force experienced as shaking in non-locomotor movement.

A. To explore percussive movements in different body parts, relating to percussion instruments.
   1. What do we mean by percussion instruments? What kind of movements do we use to make them produce sounds? (shaking, striking)

2. What am I doing with this tambourine?
   (Note: Shaking or hitting will elicit different qualities of movement.)
3. Can you make a part of you shake? What other parts of your body can you shake?
4. Choose another instrument that you must shake to make a sound.
   Example: wrist bells
5. How does your hand move with the bells to make a sound? Now feel the shaking in your whole arm.
6. How would you shake with the bells on both wrists? What kinds of shaking movements are you making? Fast? Slow? Long? Short? Make the bells dance.
   Solutions: arms move together or in opposition in up and down pattern; arms move in circular patterns above head or in small circles in lateral position.
   (additional elements: force exists in space-time - i.e., percussive movements involve rhythmic patterns of short, staccato beats; increased tempo leads to vibratory movements; use of larger body parts involves more space)
7. Put the bells around one ankle - how does your foot shake? Put the bells on each ankle - how do your feet shake together?
   Solutions: In standing positions - short, staccato movements with one foot; shaking alternate feet produces foot patterns of back and forth, side to side with some elevation of the body; in sitting position - force is extended from feet alternating shaking in the air; sitting on buttocks, leaning backward with weight on arms, legs shaking in air.
   (additional elements: force is related to balance - shaking of one leg requires shifting of body weight to opposite leg; shaking alternate legs is felt as an equal distribution of weight)

B. To explore percussive movements with different body parts using locomotor movement.
   1. You know that you can shake your bodies in sharp, percussive ways just like the sharp, clear sounds of the instruments.
   2. Now shake two parts of your body together; use small and large parts.
      Solutions: head and hands, one arm and one leg, torso and hands, shoulders and head.
   3. You can shake at different levels, and change the time and the amount of force you use.
   4. Now let these shaking movements take you through space; use different parts of your body and make a shaking dance.
      (Note: Children move alone or in small groups; percussive quality of the movements may be reinforced by accompaniment on instruments by the teacher or other children - maracas, drums, tambourines, etc.)

III Problem: To explore sustained movement as a quality of force experienced as a smooth, continuous flow of energy.

A. To explore the feeling of tension in the muscles through bending and lifting(axial movement).
  1. There are huge rocks all over the floor; bend over with your whole body and pick one up; feel the weight of it in your arms, your legs, your back.
  2. Raise it slowly, slowly, higher and higher above your head and put it down in the same way as you picked it up.
     Solutions: 1) down on one knee with other knee flexed, body weight is on back knee and opposite foot, torso bends forward with head curved over torso, arms extended in circular shape, making a circular body shape; as arms lift, body changes levels from low to high, weight shifts to forward leg, then equally on both legs as body rises; 2) body is in low crouching position, weight is on toes, neck flexed so head bends forward, both arms extended to sides with hands on floor; as body is elevated, heels drop and body weight shifts evenly to both legs; with elevation of body, arms increase range of space until extended laterally over head; 3) from a middle-level in space, legs extended in wide second position, torso bends forward over knees, arms at mid-level in wide, circular shape, body weight distributed equally in both legs; lifting is from middle level to high.
  3. Where do you feel the weight when you lift something so big and so heavy?
  4. How do you move when you do a movement like this?
  5. Some of your bodies look like the rock you are lifting.
     (additional elements: force is a phenomenon of space-time; with sustained movements, range of space increases in torso and body parts, body shape is created through the use of internal and external body space; time is slow and evenly divided)

B. To explore the quality of force as tension and resistance in the muscles (locomotor movement).
  1. Now find a rock and push it through space until you can't go any further.
  2. Let your whole body feel the weight; you can push with other parts besides your arms and hands.
     (Children move alone or in small groups; one or two children may begin and be joined spontaneously by others.)
     Solutions: Individual: 1) arms extended at chest level, body moves in forward direction, feet take alternate steps of unequal duration making pattern of long-short, long-short, creating a rocking movement; 2) tension in the shoulder is the impulse which leads body in lateral direction; feet take sideward cross-steps to correspond with body position; 3) body facing forward, torso bent at waist, arms extended parallel to one side, body

maintains frontal position but moves in lateral direction; feet cross in wide, even steps. Small groups: children tend to adopt the movement of the dominant member of group unless given additional suggestions such as, "each of you move at different levels, use different parts of your body to push the same rock, etc."
Note: In this experience, children are creating their own tension and their own resisting force against it without the use of external objects.

C. To kinesthetically feel the differences in the flow and control of energy experienced as pushing and pulling.
   1. Take a partner. One of you push and the other resist. Both of you must control your bodies so that you don't collapse.
      Solutions: Initially, children use only arms and hands to push against one another's shoulders, back, stomach, buttocks.
   2. There are other parts of you that are strong besides your arms and hands; feel the "push" in another part of your body. (Both partners experience pushing and being pushed.)
      Solutions: 1) hands pushing forward against stomach of "resister", forcing him to move in backward direction but without losing balance; 2) hands pushing forward against partner's back, both moving in forward direction; 3) stomach against stomach - impulse comes from center of body of "pushing" partner, causing back to arch, arms hanging loosely at sides, one partner moving forward, one backward; 4) stomach against back - similar to previous solution except that both partners move in same direction; 5) shoulder against shoulder - impulse for movement emanates from tension in the shoulder, body position of both partners is lateral and spatial direction is lateral; "pushing" partner has flexed elbows with arms close to chest to increase body tension; 6) hip against hip - body position of both partners is frontal but spatial direction is lateral; hip of "pushing" partner is extended over straight leg, feet move in cross-steps; "pushed" partner moves in sliding steps. (additional elements: isolation of body parts; direction and body position in space, foot patterns)
   3. What's the opposite of push? Yes, pull. Now explore the feeling in your bodies of pulling and being pulled. (Children choose same partners or different partners.)
      Solutions: 1) pulling an elbow - arms interlocked at elbows, partners facing opposite directions, both move in lateral direction, "pulling" partner extends opposite arms at shoulder level to balance body weight; both partners take wide cross-steps for locomotion; 2) pulling by a foot - child seated on floor balancing on buttocks with one leg extended in air, partner pulls from across floor holding foot with both hands, slowly walking backward; 3) pulling a leg - one child lies on side with leg elevated, arms are overhead, one resting on floor, partner pulls leg keeping body in lateral position, moving in forward direction while "pulling" partner moves backward; 4) pulling by arms - partners face each other in aligned position, arms of one grasp wrists of the other, as tension felt in the arms increases, the "pulled" partner yields to the force by allowing upper torso to bend forward while walking through space.

EVALUATION PROCEDURES AND FINDINGS

Teacher Selection

The initial decision was to select 15 non-specialist teachers representing diverse educational environments, from inner-city to middle-class suburbia. As these teachers were non-specialists, they brought with them widely varying levels of ability and interest in dance, as well as different classroom experiences and teaching styles. The CAREL dance staff had never observed any of these teachers in the classroom, but knew them by recommendation only. Several questions are posed for evaluation: Was it valid to select teachers in such a manner? Did such a method of selection bring about effective implementation of the program? Did these teachers represent the kinds of situations that might typically develop in any classroom?

Only fifteen teachers were selected, because of limitations of time and funds. Many more teachers indicated great interest in participating, and even toward the middle of the project there were teachers who wanted to enter the dance program, either because of personal interest or because of enthusiasm aroused by participating colleagues. Selection of teachers was made from diverse sources. Some were selected from prior involvement in other innovative curriculum programs, although not in dance; some were recommended by local dance educators as having had rudimentary training; others were known as practicing teachers to members of the dance component.

Evaluation of teacher selection methods is made on a twofold basis: first, the need to relate the program to the general educational scene, and second, a need to develop curriculum with teachers who were receptive to the art of dance and to using dance in their classroom. It must be noted that in order to institute dance into the classroom, diverse teaching styles, attitudes and approaches must be taken into account. In terms of developing a curriculum, the feeling of the staff was that it would be helpful to go beyond the first step of overcoming the diverse teaching styles, attitudes and approaches. The general experience of the dance staff was that, given time and facilities, any teacher can learn to use dance in the classroom. However, it was recognized that this requires considerable time and training. By choosing teachers who had prior involvement in innovative programs, or a rudimentary background in dance, it was felt that this first step would be bypassed and more could be accomplished in the alloted time. However, the majority of the teachers chosen were far less sophisticated than expected, and represented great diversity in understanding and ability, both in terms of dance and general teaching.

It would be fruitful to evaluate first the group chosen because of prior involvement in two specific innovative curriculum projects. Both of these curriculum projects have been active in the Washington school system. One project is sponsored by the Cardozo Model School system and the other by the Educational Resource Center. The first is involved with teachers and students in the inner-city; and the other with teachers and students in middle and upper-class neighborhoods. Both of these projects have been experimenting with new approaches and new materials. The assumption of the

CAREL staff was that because of exposure to innovation, teachers coming from either of these two sources would be receptive to changes and experiments in their curriculum and their teaching. It was found, however, that there was no uniform receptivity or similarity of approach among these teachers. Much of the innovation in their experience had dealt with audio-visual and other new media designed for proficiency in reading, math, and language arts. This did not necessarily prepare them to work with a group of children in the use of dance materials designed to produce individualized responses from within a group.

Another group of teachers were individuals recommended by local dance educators as having had beginning training in dance. That is, these teachers had participated in adult dance classes for a short period of time. It was found that this kind of experience, while the most productive type of preparation, did not guarantee that the teacher was able to initiate dance explorations in the classroom. Upon further work with these teachers, the staff realized that two important factors must be considered for someone who had studied dance - sensitivity and ability as a teacher, and understanding of dance as an art form embodying both a creative process and a creative product. Experience in a studio situation does not always equip a teacher to intellectually understand the concepts of dance, nor to develop problem-solving situations for children related to these concepts. On the other hand, it was found that once this particular group grasped the concepts and developed the ability to structure creative problems in dance in their classrooms, their work was extremely successful and productive.

Four of the fifteen teachers originally selected worked with preschool children and were involved with the CAREL program from October to December. At the end of this period, during a mid-year assessment, it was decided that these teachers would need separate and more intensive workshops if they were to contribute material that could be used in the preparation of the curriculum. Classroom visitations by the dance staff indicated that they were neither skilled nor experienced as teachers, and lacked understanding of the needs of young children. They were also, for the most part, slow to absorb and utilize the materials presented in workshops. When the staff was informed that the CAREL Laboratory would be phased out in May, it was deemed advisable to devote more time with elementary school teachers for two reasons: 1) the latter were able to implement and develop the dance materials, and 2) the children on the elementary school level were able to concentrate on dance problems for longer periods of time, giving the staff a richer feedback in terms of curriculum development.

To assure some degree of homogeneity, it should have been possible to establish specific criteria for teacher selection at the outset. The staff could have selected only superior teachers, or teachers who had an orientation toward creative movement through an involvement with art, music, or drama. It would have been possible to select such teachers by observing them in their classrooms over a period of time. However, the

CAREL dance staff, within the developmental framework of this year, was not interested in a guaranteed success. The aim of the program was to test the feasibility of establishing a dance program in any classroom with interested teachers. This having been established, teacher selection criteria would then become more selective. Teachers would be observed in their classrooms, and selection would be made only after a thorough knowledge of their teaching style and sensibility toward dance as an art form.

Findings from Teacher-Workshops

The aim of the CAREL Dance Staff was to develop curriculum materials as guidelines for teachers in initiating and building dance experiences in a wide variety of classroom situations. The focus of the curriculum was on problem-solving ability through movement. Workshops and classrooms worked hand in hand as a proving ground. Each workshop was designed both to familiarize the teacher with a specific dance concept and to encourage individual implementation of that concept in the classroom. The underlying approach leading to the goals of the program was to help teachers develop a kinesthetic awareness of dance and a verbal movement vocabulary that would facilitate movement experiences. Each session was geared toward showing teachers how to organize a dance situation in their classrooms - a situation that would allow for flexibility for the child within the structure of a concept. Within the conceptual framework teachers were encouraged to improvise and develop their own ideas, and to be receptive to dance possibilities within any classroom experience. The emphasis in both workshops and classrooms was on developing prototype lessons built around the basic concepts of Time, Space and Force. While the concepts remained fixed, the possibilities for elaboration remained open and flexible.

Teachers' responses to workshops made it possible to judge the structure and clarity of the problems presented. The first workshop was designed to introduce all of the basic concepts, and to suggest some movement possibilities within each concept.

As one element of Space, for example, a problem was presented on body shape. Teachers were asked to describe a shape that the body makes in space using a box as an image. Teachers worked alone, in partners, or in small groups, exploring the angular qualities of their own body parts, and the spatial relationships created through the combining of one or more forms.

During the first week of observations, the staff noted that all of the teachers presented this problem in their classrooms. Although the content was the same, the approach adapted from the workshop led to a diversity of solutions. By reemphasizing the spatial concept of body shapes, rather than the idea of a box, and reinforcing individual explorations, this simple problem took on varying degrees of complexity in different classrooms.

One teacher, for example, suggested that the children make boxes of different sizes, emphasizing the range and quality of body parts; another pointed out that boxes exist on different levels; and another encouraged the children to work in large and small groups to "fill in" the new space which they had created.

As teachers became more inventive in their own dance work, they improvised further on body shape, going beyond the image of a box. They used circles, squares and triangles, and occasionally related these improvisations to concepts in math, language arts, and social studies.

In one class, the teacher used Valentine's Day as the point of departure. The problem was to explore different kinds of Valentines - e.g., thin, fat, long, low, high. As the teacher suggested new ideas so did the children. Building from the original exploration of body shape, two children formed a shape that created an opening in a valentine box. Faced with this new problem, the other children devised ways of locomoting through the opening of the box. The problem then became one of dealing with internal and external space involving fixed and locomotor movements.

In an early workshop on Force, the problem was to explore any of the movement qualities characteristic of familiar objects or activities in the environment. Again, it was suggested that solutions be developed individually or in groups. Three participants chose qualities inherent in a sewing machine - i.e., sustained, vibratory and percussive; one individual adapted the percussive movements of a clock; and another, the swinging qualities of a wave. As an elaboration of the problem, teachers were asked to explore sustained movement (the most difficult to control) in a normal activity in that particular movement quality. Two teachers abstracted the gestures of a tennis match, one bounced a balloon in the air, three people improvised a baseball game in slow motion.

With ensuing workshops the solutions that teachers developed became more complex and intricate. For the most part, they attacked each problem with alacrity, incorporated more dance elements, and worked for longer periods of time. As the relationship between concept and problem was more clearly perceived, teachers demonstrated increasing ability to organize the elements of a problem, to make independent responses, and to objectify their solutions into symbolic dance form.

An example may be cited from one of the later workshops on Force, where the problem was to explore swinging movements. In the initial presentations, the participants were involved for approximately five minutes. In reinvestigating this problem, they were absorbed for fifteen minutes. In the process, they combined elements learned in other workshops - levels, rhythm, locomotion, and floor pattern. Each individual exhibited several solutions which involved swinging of body parts as well as the torso, whereas in the first instance some were able to demonstrate only one or two simple solutions.

In the first weeks of the program, materials from the workshops were adapted directly into the classroom. Some teachers used ideas they had encountered before in "rhythms", or continued to draw upon narrative images from books. As they became more receptive to the improvisational approach presented in the workshops, they were increasingly able to take cues from children, observe them more closely, and develop their ideas into movement sequences.

Through the guidance of the dance staff, the teachers realized that even the best materials available did not take the place of direct, personal interaction. The value of the workshops is that through critical observations of themselves and their peers, teachers developed a sharper and quicker eye. They were better able to perceive the direction that the children were taking with a given problem, to single out a child's pattern and understand how to develop it, and in most cases to cope with unsuccessful experiences without loss of confidence or control.

The effectiveness of the workshop materials was due in large part to the unified approach of the CAREL dance staff. Each of the specialists who were with the program for the entire developmental period were experienced in teacher-training as well as in children's dance. The success of the workshop was also the result of prior planning of materials and a cohesive manner of presentation. Both individuals brought to the program a conceptual problem-solving approach to dance, and both approached teaching with a view toward guided individual expression rather than imitative responses.

Findings from Teacher Observation Forms

Teacher observation forms were designed early in the program to help teachers: a) organize learning experiences around a major concept, b) develop problems which explored the concept through the use of dance elements, c) focus on individual and group solutions, d) make continuous evaluations with respect to children's participation. Each teacher submitted written reports to the consulting member of the dance staff who regularly observed in her classroom. These forms served as raw data for the prototype lessons which were developed by the staff.

Planning lessons in advance and recording outcomes systematically proved to be the most difficult aspect of the program for teachers. At a mid-year assessment, two factors were evident: 1) that teachers were inadequately trained for this type of reportage, and 2) that time and experience were required to appropriately identify the concepts which were reflected in specific activities.

Written reports of dance experiences only proved of value when extremely accurate in descriptive material. It was several months before the teachers were able to report their classroom experiences with clarity and precision. The ability to write reports is directly connected with discipline and perception of dance - i.e., the need to know what to look for and how to express in movement terms what was perceived.

Reports were originally conceived to serve a dual function - to provide the CAREL staff with materials for prototype lessons, and to provide teachers with guidelines for movement observations. It was also intended that the process of recording would help the teachers develop powers of self-criticism, by having to re-evaluate their teaching process while writing.

Toward the end of the year, materials became more focused and the content became richer. Teachers were able to work more flexibly, ranging from pre-planning and presenting lessons, to recording experiences that occurred spontaneously during a dance session within the guidelines of the observation form.

Findings from Classroom Observations

It is always a question as to whether any new capacity for creative dance is being developed, or whether a child's existing capacity is being put to far greater and diversified use. It was the intent of the CAREL dance staff to help teachers initiate a stimulating environment which would allow for either condition.

Two levels of criteria were developed for evaluating children's response to dance in the classroom - one in terms of the general participation and involvement, and the other in relation to problem solving.

In the former, the concern was with the degree and quality of participations. In classroom observation forms for each dance session, teachers were asked to respond to four questions: 1) Did all of the children participate all of the time? 2) Did some children participate more frequently? 3) Did some children initiate ideas more than others? 4) Did some children go beyond the problem in creating their own movements? (See Appendix C, page 1)

As to the degree of participation: In the beginning of the program teachers tended to expect more participation from girls than boys, since they appeared initially more receptive. Teachers were also helped to become aware that certain children participate more frequently to the complete exclusion of others. As teachers' grouping patterns became more flexible for different kinds of explorations, children became involved more diversely. By mid-year, the participation of boys was an inherent expectation of each dance session. Once they received recognition for their efforts from teachers and peers they became, in some classrooms, the dominant performers.

As stated above, some children reflected considerable inventiveness as soon as a dance environment was made available, others confronted this new activity with hesitation. As the program ensued, it became increasingly evident that one of the most positive aspects was not only that children were developing individual means of expression, but were working effectively with other children in solving movement problems. In the latter instance, there was little question of combining sexes. With a focus on the problem to be solved, boys and girls freely chose each other or readily accepted a child suggested by the teacher.

In general, a direct relationship was noted between teachers' commitment and children's involvement. As individual teachers became more confident and enthusiastic about dance, the degree of participation became greater. By the end of the year, there was close to one hundred per cent participation in every classroom.

As to the quality of participation: Movement experiences were designed in terms of problem-solving through the use of dance elements. They were conceived as a departure from routine body mechanics or techniques into an exploration of what the body can do. In the process of investigating the infinite uses of his body, a child begins to create new movements in the sense of being new to himself and to the environmental setting which encourages such exploration.

As any creative endeavor is a developmental, uneven process, teachers were helped to realize that not all aspects of a dance problem would be of interest to all children, nor would all new movement which they explored be necessarily creative. For purposes of an on-going evaluation, the dance staff has taken the following position: If some quality of dance movement occurs that is new to the child, reflects his own search for the expression of ideas and feelings, and shows development in relation to his stage of progress, that is more important educationally than whether or not that response has ever occurred before.

Evaluation in an art form as unexplored as children's dance can only be considered in relation to the initially stated rationale, and the underlying premises stated under expected outcomes. Within the scope of the developmental phase of this program, the broad question posed for evaluation is whether there are identifiable modes of a child's behavior that lead to an evolving, observable style. In this context, guidelines for the evaluation of problem-solving in movement were established:

1. Organization - ability to organize the elements of a problem. Did the child show increasing ability to organize his movements and ideas?

2. Fluency - number of dance elements in the solution. Did the child demonstrate many responses to the problem - i.e., initiate a wide variety of alternatives?

3. Independence - ability to make independent responses. Did the child move in response to a personal interpretation of a problem? Did the child adapt new movement ideas and extend them into his own movement vocabulary?

4. Objectification - transformation of concepts into symbolic dance forms. Did the child demonstrate an increasing ability to translate dance concepts into specific movement forms? Did the child demonstrate an ability to observe and evaluate, in movement terms, the qualities of his own movements?

As the process unfolds, children pose new problems for themselves which reflect the need for greater skills and competencies. A major focus of the dance staff was to help teachers become sensitively aware that the kinds of problems children set for themselves would provide great insights as to their individuality and inventiveness. It is at this point that the introduction of skills becomes appropriate, for each child responds to problems uniquely depending upon his perception and kinesthetic development. The concept of skills in dance requires special consideration. For future evaluation, four questions are suggested:

1. What skills are required for a child to be able to perform this movement problem?

2. What skills is he developing by exploring this problem?

3. What new skills will emerge as a result of this type of problem-solving?

4. Can these skills be transformed and developed into new types of problem-solving?

Findings from Teachers' Evaluations

The principal procedures for evaluating teacher growth and effectiveness were classroom observations, teachers' written reports, and the quality of participation in workshops. These materials, which reflected teachers' competencies, attitudes and behavior, also served to demonstrate the appropriateness of the CAREL dance program at various stages of development.

On the final evaluation questionnaire, teachers were asked to state preferences among the three types of implementation. The majority of the teachers indicated that workshops were most effective, but that there was a close and necessary relationship between workshops and classroom experiences.

The general preference was for more workshops, but it was agreed that each individual session should be no longer than the two hour span which had been established. One teacher suggested the possibility of a three hour session on Saturday mornings, with one hour devoted to viewing films, listening to records, and experimenting with percussion instruments.

The opinion of the dance staff is that, given the intensive physical activity required, a working period of two hours is sufficient; less than that would be unproductive. Weekly workshops during the first six months would have been valuable to reinforce classroom experiences, but were not possible due to limitations of staff and time.

A classroom teacher has a very heavy schedule. If teachers were observed and selected in the spring (April or May), prior to the initiation of the program, intensive workshops could be held in August, as preparation for the ensuing year. Additional workshops during the year, however, would not replace classroom visitations.

Teachers' responses to the organization of materials presented in the workshops were of special interest to the dance staff. All but one concurred with the approach of introducing the three basic concepts of Space-Time-Force rather than beginning with traditional imagery or stories. Having been presented with a frame of reference at the outset, they were better able to develop problems which focused on dance improvisations, rather than on imitative gestures or "story telling". All of the teachers expressed the view that the CAREL approach to teacher preparation for dance was flexible yet sufficiently structured to provide them with a body of ideas which they could pursue in subsequent years.

On the question of the approach to teaching dance, the difficulty most commonly identified was that of focusing on the qualitative aspects of a movement problem, rather than on a series of fragmented experiences or on the mere numbers of children participating at any given time. The search for quality led to a recognition of the need for building an appropriate movement vocabulary. Teachers expressed the belief that effective instruction in communicating movement ideas to children only emerged with an ability to think in movement terms rather than in conventional language. The difference between "pretend you are an elephant" and "feel the weight and size of an elephant as you move" serves as an example.

Methods of grouping for successful dance explorations led to broader considerations of grouping in other learning situations. Teachers experienced greater success in working with groups of 4 or 5 (in addition to partners and two's), and in dividing the total group into 10 or 15 children at a time. Problems of attentiveness of children observing while other performed persisted, but teachers expressed increasing confidence in their ability to control the situation.

A further aspect of self-evaluation was the statement that teachers need to listen more than they talk, and must be more conscious of the language they use. Since initially a problem is presented in verbal terms, there is a need to develop a coherent vocabulary. Essentially, however, the problem becomes a movement experience, so that the language must emanate directly from dance itself. Teachers recognized that they tended to give instructions which compelled children to explain their ideas before exploring them in movement, which frequently reduced their spontaneity.

The use of language in eliciting responses to an art form requires a delicate balance - for teachers, enough verbal cues to lead directly into movement; for children, as little talk as possible before ideas are tested in practice. With increasing experience, teachers found that discussion after an activity or at the end of a session sharpened children's perceptions and developed bases for critical evaluation drawn from actual dance problems they had observed.

Responses to a question on teachers' expectations for children yielded interesting insights. The consensus was that within a classroom environment the goal was not one of seeking polished performance. Rather, teachers expressed concern as to how to be aware of children who are initially uninterested in dance at all. Teachers' own exposure to the nature of the creative process led to the suggestion that it was unrealistic to expect every child to participate at all times. A related observation was that individuals respond differently and that teachers must become sensitive to these nuances of behavior.

The above findings confirmed the position taken by the dance component throughout the year, that children do not have to explore every aspect of the prototype lessons with every possible variation in order to experience the essential qualitative aspects of dance. Neither do they have to achieve maximum body control before they can produce forms. (See Appendix C, pp. 2,3,4)

Presentation of the CAREL Dance Program

Presentations and demonstrations of the CAREL Dance Program were given at the following national conferences: National Association for the Education of Young Children, New England Kindergarten Teachers' Association, National Art Education Association, at American University and D. C. Teachers' College, at the Modern Dance Council, and in consultation with the Dade County Department of Public Instruction, Miami, Florida.

In addition, two dance films have been produced. One, complete, is entitled "From Movement to Dance - People, Animals, and Things" (black/white, sound, 19 minutes). It is designed to show the relationship between everyday conventional actions and dance movement. Improvisations are by Maida Withers, professor of dance at George Washington University. The second, which is forthcoming, is entitled "Children Dance" (black/white, sound, 15 minutes). It was made with children in the classrooms (K-3rd grade) associated with the dance program during the current year.

RECOMMENDATIONS

Teacher Selection and Preparation

Given the context of an experimental program, with the limitations of year-to-year funding and the necessity for substantial "proofs", we would recommend a different procedure for teacher-selection. While the underlying assumption that any classroom teacher can conduct a dance program may be valid, the question of the amount of time necessary for preparation becomes focal.

The experience of the dance component, which is also shared by other components, has been that relatively random selection of teachers without prior observation of their general classroom behavior yields a higher rate of attrition and less productive results than are desirable. The arts are perhaps more closely related to a personal teaching style than any other area of the curriculum because they are reflected through emotions, attitudes, and values, rather than through skills and techniques. The latter can be systematically taught, but the arts emerge from an intuitive, inductive path of discovery which involves the teachers' own exploration and self-awareness. Evaluations of staff observations and teachers' written reports indicate that the experiences of the first year have been the initial step in providing teachers with sufficient knowledge to elaborate upon the concepts they have learned and to begin to develop their own programs.

Within a five year prospectus, it would be feasible to choose teachers randomly, with the intent that the first year be devoted to the broadest type of exploration. In preparation for such a heterogeneous group we recommend an intensive 3-week summer workshop, five mornings a week for 2-3 hours, conducted by a staff who will continue to work closely with these teachers throughout the school year.

For the demonstration phase, therefore, we project a 2-year period. The first year would replicate the cycle established this year - workshops - classroom observations - conferences - workshops. During this time, the dance staff would function as specialists, working with both teachers and children in the classrooms, as well as continuing the workshops on a bi-monthly or weekly basis.

The prototype materials which have been designed during the first year can be given to the same group of teachers to be used improvisationally throughout the second year. Having explored the elements of dance directly in workshops, it then becomes possible for teachers to translate concepts and lessons from the written word to the experience itself. Without some type of prior involvement, such materials are reduced to prescriptive methodology. It is recommended, therefore, that any future program must include teacher workshops, and in the developmental phase, teacher workshops and classroom visitations.

In addition to the need for direct participation in this art form, we found that teachers need guidance in learning to write coherent, focused reports - first, because dance itself is a new experience for most teachers, and second, because they are not accustomed to writing precise observations or evaluations. In both cases, there is a necessity for developing a vocabulary which describes behavior in movement terms, rather than in general, judgmental terms. Part of the responsibility of the dance component in this suggested 2-year developmental phase would be to help sharpen teachers' perceptions and to develop a movement vocabulary which lends itself to written interpretation. The experience of the dance component has been that, for the greater part of the first year, written reports of classroom activities which had not been observed by a staff member were uninformative. In other cases, written reports did not correspond with the level of performance observed in the classroom.

Toward the end of the year, teachers had better control of the dance environment, more understanding of the unique nature of this type of teaching-learning situation, and were beginning to think and conceptualize in movement terms. Written reports became more focused because of teachers' increasing ability to make more objective observations of their own styles, and of the resultant performance of the children.

During the second year, teachers would be more receptive to working from prototype lessons which they helped to develop, which would reinforce their ability to record situations with greater precision. In addition, the interaction of concepts and practice makes it possible for teachers to develop a dance vocabulary to be used with children so that instructional procedures, both verbal and written, are formulated within a dance context. In so doing, a primary objective for teachers and children of developing a kinesthetic and verbal language can be attained.

In order to clarify the role of the teacher in an experimental program such as this, we recommend the concept of a contractual relationship - i.e., defining the commitments of both staff and teachers. For teachers, these include: 1) regular attendance at workshops, 2) a scheduled time for dance in the classroom (which may vary among teachers), 3) systematic written reports. For the staff, these involve: 1) organized presentation of materials at workshops, 2) regularly established classroom visitations and conferences, 3) careful scrutiny and guidance of teachers' written observation.

Implementation in the Schools

Teachers representing a cross section of urban and suburban schools should be involved in any future program. We recommend, however, the use of fewer schools during the developmental stage, and a wide distribution during the field-testing stage. Rather than one teacher from each school, we recommend several teachers within a school for the following reasons:

1) sharing and reinforcing observations from each other's classes, 2) sharing equipment - e.g., books, records, instruments, films, 3) utilizing a common space provided by the school - e.g., auditorium, gym, cafeteria, utility room, 4) possibility of observing various age groups, 5) utilizing the school as the locus for workshops, 6) greater time allocation from staff specialist.

Development of a Process-Model Curriculum

As evidenced by the material contained in the body and appendices of this report, a substantial amount of pertinent data has evolved during the development year. A rationale and conceptual framework has been formulated, which underlies the conceptual basis for the implementation of the program. A format has emerged for the preparation of teachers and for prototype lessons which can be adapted for wide use in classrooms. Although the expected outcomes for children's behavior have been stated in general terms, specific criteria related to the elements of dance have been identified. These criteria serve as indicators of operational goals for a projected five-year program.

Given this preliminary material, we recommend as a second step after a two-year developmental phase, the refinement and elaboration of this data into a process-model curriculum. While the basic concepts will remain the same, the extension of those concepts into instructional procedures and dance experiences judged most effective should be prepared for wider distribution. Plans for assessing student growth in relation to aesthetic criteria should be designed subject to modifications during the field-testing phase. The total development of the process-model curriculum must be flexible and open to continuous revision as specific needs become evident.

Dissemination should be carried out on several levels. Public boards of instruction, and colleges and universities involved in teacher preparation should be apprised of this curriculum for both pre-service and in-service purposes. Local and state school systems should be encouraged to finance and provide their own personnel to function as specialists for staff development. Finally, articles explaining the program should appear in leading educational journals, as well as those concerned with the arts and humanities or a particular art form.

DANCE - APPENDIX A

Field Schools Participating

January 1969

SCHOOL	TEACHER	No. of CLASSES	GRADE	TOTAL PUPILS (approximate) ALL CLASSES
District of Columbia				
Bruce School	Anna McCoy	1	3rd	25
John Eaton Elementary	Virginia Ann Reilly	1	3rd	30
Grimke Elementary	Dorothy Douglas	1	1st	40
Private Schools				
Green Acres	Neil Campbell	1	1st	23
	Biby Poor	1	1st,2nd	23
Maryland				
William Tyler Page	Mary Wagman	1	3rd	28
Virginia				
Alexandria				
Cora Kelly Elementary	Johanna Fulton	1	K	26
Mt. Vernon Elementary	Johanna Fulton	1	K	27
Arlington				
Page School	Margie Eckhaus	1	2nd	30
				252

DANCE - APPENDIX A

Workshops

Workshops were held at the American University dance studio bi-monthly from October 11, 1968 - March 21, 1969.

Date	Concept
October 11	Introduction of Conceptual Framework
October 18	Force
October 25	Force
November 8	Space
November 22	Time
December 13	Teacher-Directed Experiences and Evaluation (Appendix C)
January 10	Space
January 24	Time
February 7	Time
March 7	Imagery
March 21	Final Evaluation

DANCE - APPENDIX A

Workshop - December 13, 1968

Observations of Teacher-Presentations

1. What was the major concept presented?
2. How were the ideas communicated in movement terms?
3. How were understandings extended in terms of the instructional cues used by the teacher?
4. What sorts of solutions did you observe in relation to the original problem set?
   e.g. use of space-time-force
   individual movement - in couples, groups
5. Did the presentation of the problem lend to individualized solutions?
6. What was the role of the teacher in this presentation?

DANCE - APPENDIX B
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Mettler, Barbara. Materials of Dance as a Creative Art Activity. Tucson, Arizona: Mettler Studios, 1960.

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Sheehy, Emma. Children Discover Music and Dance. New York: Henry Holt and Co., 1959.

Tooze, Ruth and B. P. Krone. Literature and Music. Englewood Cliffs, N. J.: Prentice-Hall, 1955.

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DANCE - APPENDIX B

Discography of Dance Accompaniment

Title	Producer	Distributor
Childhood Rhythm Records (3-10")	Ruth Evans	Educational Record Sales 157 Chambers St., N.Y.
Come Dance With Me (2-12")	Virginia Tanner	Hoctor HLP3078 Waldwick, New Jersey
Dance-a-Long (1-12")	Betty Walberg	Folkways 7651
Dance-a-Story (Records and Storybooks)	Ann Barlin	RCA LE 101-108 Ginn & Co.
Phoebe James Creative Rhythms (10-10")	Phoebe James	Educational Record Sales
Progression	Lohoefer	Dean Records A 103-5 Richmond, Va.
Rhythm Instruments (CC614) Adventures in Rhythms (CC614) Vol. I Music for the Dance (RL-3) (5 albums - 15 records) The Fundamentals of Music for Dancers (CC609) Motivations for Modern Dance (CC610)	Ruth White	Rhythm Productions Cheviot Corp. Dept. DM Box 33485 Los Angeles, Calif.
Songs of the African Veldt	Marais and Miranda	Decca Records

DANCE - APPENDIX B

Films

FROM MOVEMENT TO DANCE - PEOPLE, ANIMALS AND THINGS. 19 min., b/w, 1969. Shows the relationship between conventional, everyday actions and dance movement as expressed through dance improvisations by Maida Withers. Produced by the Central Atlantic Regional Educational Laboratory, 1200 Seventeenth Street, N.W., Washington, D. C. 20036.

FROM THE INSIDE OUT. 13 min., 1967, r$7.50, s$110, Randim Films, 220 West 42nd Street, New York, New York 10036.
While a first effort at film-making, it was shot by professional cameraman George Ancona and the result is a simple but successful film. Film shows flowering of individuality through creative dance. Six teenage girls, students of Carolyn Bilderback, in group improvisations in performance of their own individual dances which have been choreographed "from the inside out."

HAIKU. 28½ min., 1967, r$8, DF s$135, Center for Mass Communication, Columbia University Press, 440 West 110th Street, New York, New York 10025.
Students at Columbia under direction of dancer and choreographer Jane Dudley. Based on traditional Japanese poetry. Useful for fellow students and teachers. Directed and produced by Leo Hurwitz and Manfred Kirchheimer.

LEARNING THROUGH MOVEMENT. 32 min., 1966, r$20, s$165, S-L Film, 5126 Hartwick Street, Los Angeles, California 90041.
Covers a school year of work with elementary school children in a creative dance class, showing their physical, emotional, and intellectual development. Best film now available on children's dance.

MOVEMENT IN TIME AND SPACE. 30 min., Peter M. Rodeck and Co., 4 West 16th Street, New York, New York 10004.
Part of a BBC series called "Discovery and Experience." Pre-adolescent girls and boys solve movement problems.

DANCE YOUR OWN WAY. 10 min., color, r$6, s$120, Bailey Films, 6509 De Longre, Hollywood, California 90028, also New York Public Library, Donnell Branch, 20 West 53rd Street, New York, New York 10019.
Creative dancing for elementary school children. It shows spontaneous dancing of youngsters, to primitive music and rhythms. Produced and directed by Lawrence P. Frank, Jr. and Guy Goldsmith.

FREE MOVEMENT EXPRESSION. 12 min., color, r$7.50, s$150, Barbara Mettler, Tucson Creative Dance Center, 313 N. Cherry Avenue, Tucson, Arizona 85719. Individual and group modern dance improvisations by Barbara Mettler Group. Narration.

INTRODUCTION TO BODY MOVEMENTS. 11 min., color, s$125.
Basic principles of motor skills for elementary classes.

MOVEMENT IMPROVISATIONS. 19 min., color, r$10, s$200, Barbara Mettler, Tucson Creative Dance Center, 313 N. Cherry Avenue, Tucson Arizona 85719. Four student improvisations.

THE PLASTIC BODY. 29 min., 1958 kinescope, r$7.50, s$100, Dance Films Association, Inc., 250 West 57th Street, New York, New York. (Rentals to members only.)
A creative dance demonstration produced and narrated by Jane Josepian with dance students from the University of Utah. Discusses how movement is made expressive through manipulation of the elements of time, space, and energy.

SOUND AND MOVEMENT. 17 min., color, r$9, s$180. Barbara Mettler, Tucson Creative Dance Center, 313 N. Cherry Avenue, Tucson, Arizona 85719.
Free modern dance improvisation with unconventional musical instruments, narrated explanation.

Forthcoming:

CHILDREN DANCE. 15 min., b/w, 1969.
Educational dance in the classroom of children in K-3rd grades in Washington, D. C., Virginia, and Maryland. Produced by Geraldine Dimondstein and Naima Prevots - Central Atlantic Regional Educational Laboratory, 1200 Seventeenth Street, N.W., Washington, D. C. 20036.

DANCE - APPENDIX C

Teacher-Observation Form

Any dance activity may include more than one concept - please use this form for describing each concept involved.

1. Concept - What basic elements of dance are involved in this activity?
2. Problem - What is the major concept involved?
3. Solutions - How did the children respond to the problem? Individually? In groups?
4. Elaboration - What in the material lends itself to further movement ideas?
5. Evaluation -
   - a. Degree of participation
     - (1) Did all of the children participate all of the time?
     - (2) Did some children participate more frequently?
     - (3) Did some children initiate ideas more than others?
     - (4) Do some children go beyond the problem in creating their own movements?

DANCE - APPENDIX C

NAME________________________ DATE____________________

1. Of all the activities (workshops, classroom visitors, conferences) which had the most impact on your work in dance?

2. Of the dance experiences suggested, which ones did you find most helpful?

3. Which other ideas have you tried? How did they work?

4. About how much time have you been spending on dance each week?

5. How did you fit the dance activities into your school day? Were there and problems in doing so?

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6. What suggestions would you have for further workshops of this kind?

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7. Has your general teaching style changed as a result of your participation in the CAREL dance program? In what way?

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DANCE - APPENDIX C

1968-69 Teacher-Consultants Reports of the Dance Component

Your recent written observations as to the effectiveness of the CAREL dance program have been very helpful. We would like, at this time, to incorporate a more comprehensive report of each classroom situation to U.S.O.E. in May. Please respond to the questions below, and add any other evaluative comments which will help us judge the effectiveness of the program. Please mail in your comments by April 15.

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1. What have you observed about your pupils this year that you did not realize about former pupils?
2. What have you learned about yourself since the beginning of this program?
3. What new grouping patterns have you established as a result of the dance program?
4. What changes would you make with this program when you begin next year?
5. Have experiences with dance in the classroom affected your work in other subject areas at your grade level? How?
6. What do you believe to be the most important outcomes of your creative dance program this year?
7. What have been the most meaningful dance experiences used this past year?
8. What do you feel about teachers' expectations for children in relation to dance?

CAREL ARTS AND HUMANITIES CURRICULUM DEVELOPMENT PROGRAM

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Mary Louise Grayson
Sharon A. Jones

Dance

Geraldine Dimondstein . . . . Component Director
Naima Prevots

Literature

Benjamin DeMott . . . . Component Director
Jeanette Amidon
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Sam Cornish
Maxine Kumin

Music

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